The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 830.---Vol. XXI.] LONDON, SATURDAY, JULY 19, 1851. [Price 6d.

LLANELLY, CARMARTHENSHIRE.

VALUABLE COAL MINE, estimated to produce a nett revenue of £4500 per annum.

MESSRS. TOPLIS AND SON have been favoured with instructions from the Mortgagee to SELL, BY AUCTION, at the Auction Mart, near the Bank of England, in London, on Wednesday, August 13, 1851, at One punctually,

THE LION COLLIERY,

Together with the PLANT, MACHINERY, OFFICES, and APPURTENANCES. The above is one of the Anthracite Collieries clustered around the Amman Valley, and is nearest of any importance to the PORT of LLANELLY. It consists of one seam of coal, called "THE TREGLOIN," comprising 320 ACRES, of which fourteen only have been worked, and the remainder is estimated to produce 707,632 tons of coal, yielding a

NETT ANNUAL PROFIT OF £4500 FOR TWENTY-THREE YEARS.

The MINE is in excellent working order, and possesses all necessary appliances for working out the coal. There are two equally valuable coal-fields adjoining, which can only be worked by means of the present level on this property, and may be secured at a small rental.

Printed particulars, with maps, may be had of Mr. John Arthur, Llanelly; of Mr Jenkin Lewis, the overlooker of the works, at the Colliery; also of Mr. Henry Clarke, solicitor, 61, King William-street; at the Auction Mart; and of Messrs. Toplis and Son, 16, St. Paul's Church-yard, London.

GLAMORGANSHIRE,

VALUABLE FREEHOLD ESTATES AND MINERAL PROPERTY.

MR. THOMAS WATKINS will SELL, BY AUCTION, at the Cardiff Arms, CARDIFF, on Wednesday, the 20th day of August next, at One o'clock precisely, in 18 lots, the valuable FREEHOLD ESTATE, called the

MISKIN ESTATE,

situate in the parishes of LANTRISSENT, PENDOYLON, YSTRADYRODUCK, LANWONNO, and ABERDARE, in the county of GLAMORGAN, containing altogether nearly 4500 acres, of which 3500 acres are within the Mineral Basin of Glamorganshire.

Miskin House is situate about two miles south of Lantrissent, seven miles from Cowbridge, and ten miles from Cardiff, and with the demesne lands and farms adjoining (through which the South Wales Railway passes), contains about 700 acres.

The estate is beautifully wooded—the River Ely, abounding with fish, runs through it, and the roads in the neighbourhood are good. The chief part of the mineral property lies in the Rhondda and Aberdare Valleys. The Aberdare Railway passes through one of the farms, and the Rhondda branch of the Taff Vale Railway, now in the course of formation, will pass through several of the other farms—thus affording every facility for working the minerals.

The mineral property has been lately surveyed—black-band has been discovered, and the various well-known mineral seams in the district exist under the property.

Particulars, with plans of the property and conditions of sale, may be obtained of Messrs. Baker and Co., solicitors, 52, Lincoln's Inn-fields, London; of the auctioneer; or at the office of Mr. E. P. Richards, solicitor, Cardiff.

IRON WORKS, &c., WORKINGTON, CUMBERLAND.—TO BE LET, as may be agreed upon, with immediate possession, the DERWENT SIDE IRON-WORKS, situate on the QUAY, WORKINGTON, CUMBERLAND, consisting of FURNACES, ENGINES, ROLLERS, HAMMERS, &c., suitable for carrying on an extensive manufactory of Merchant Iron; also a CHAIN SHOP, with six hearths and fire-blast, together with a large anchor forge, offices, warehouse, and moulding room on the premises.

The above are in the immediate neighbourhood of excellent coals and red ore. Vessels trading between this port and Glasgow or Liverpool may be engaged at very low freights.—Cartage from the works to place of shipment not more than *threepence* per ton. Its locality commands a considerable local trade, being in the centre, or thereabouts, of seven ship-building establishments; and from its proximity to the railway station at Workington, and but a few miles distant from the depôt of the Hematite Iron Ore Company, at Whitehaven, it offers considerable inducements for the manufacture of tin-plates.—For particulars apply to J. Harrison Guy, who has ON SALE NINE PAIRS of CHILLED and GRAIN ROLLS, TILT HAMMERS, ANVILS, &c. (newly purchased from the Mersey Steel and Iron Company, Liverpool), one pair of new boiler-plate rolls, one pair of angle iron rolls (new), a large quantity of mill and forge tools, a quantity of chain cables, and about 100 tons of pig-iron.—Workington, July 13, 1851.

WALL'S-END COLLIERY.—TO BE LET, and entered upon on or after the 28th day of September next, for such a term of years as may be agreed upon, all that CURRENT-GOING COLLIERY, well-known by the name of WALL'S-END COLLIERY, at present held by Messrs. Archbold and partners, under lease from the Dean and Chapter of Durham, comprising the COAL MINES under the whole of the lands belonging to the said Dean and Chapter, in the township of WALL'S-END, in the county of NORTHUMBERLAND.

The Low Main Seam, which has been sunk to at a depth of 22 fathoms below the Bensham Seam, and the Beaumont Seam, which has been bored to at a further depth of 23 fathoms, remain untouched throughout the Royalty. The Low Main Seam, in the royalty next adjoining, is of good quality, and is worked for gas purposes.

The Bensham Seam supplies the vend of the existing colliery. The colliery is contiguous to, and has shipping berths on, the River Tyne.

Plans of the workings of the colliery, and further particulars, may be known on application to Mr. E. F. Boyd, Urpeth Colliery, near Chester-le-street; or at the offices of the Registrar of the Dean and Chapter of Durham, 26, South Bailey, Durham.

Durham, July 2, 1851.

VALUABLE COLLIERY TO BE LET, at NEW LAITHS, near BARNSLEY.—TO BE LET, and may be entered upon immediately, the SEAM of COAL called the MAPPLEWELL BED, about 47 inches thick, extending under the New Laiths Estate: about 1¼ mile from the town of Barnsley, comprising upwards of 200 acres of land.—Also, the well-known SEAM of COAL, called the BARNSLEY BED, of the thickness of 9 feet, and about 120 yards deep from the surface, and extending over the same estate. A short and easy communication may be made to the Barnsley Canal Navigation, which passes within a few yards of the property.

Further particulars may be had, and plans and borings seen, by application to Mr. H. Holt, mineral agent; or Mr. Nettleton, solicitor, Wakefield.—Wakefield, July 15, 1851.

NAILSEA NEW COLLIERY,—NAILSEA, SOMERSETSHIRE.—The proprietors of this Colliery wish TO DISPOSE OF PART of their INTEREST in it, and are desirous to TREAT with some party or parties for the same. The colliery is in partial work, and but a comparatively small further outlay will be required to complete it; all the machinery necessary is erected, and the work in a forward state.

A large market through the west lies open to the Nailsea Coals—approachable by the Bristol and Exeter Railway, near which the colliery is situate: there is also a considerable local trade. The proprietors beg to assure parties who may feel inclined to invest capital that they have the greatest confidence of this colliery proving highly successful and profitable.

COLLIERY ENGINES AND FITTINGS.—An extensive PUBLIC SALE will, in the COURSE of a FEW WEEKS, be HELD at LUMPHINNAN'S COLLIERY, LOCHGELLY, of ENGINES and COLLIERY FITTINGS and UTENSILS, so far as not previously sold by private bargain, comprising a high-pressure PUMPING ENGINE, of 40-horse power, 4 pumping and winding gigs, of 14 to 18-horse power, pumps, steelyards, four and two-wheeled carts, tramplates, smiths' tools, and other articles required at a going colliery. These may be inspected on application to the manager, at the colliery.

Apply to Robert Henderson, Esq., of Glencraig, Lochgelly; or Mr. William Fraser, town clerk, Inverkeithing.

AN OPPORTUNITY is now OFFERED to a GENTLEMAN of influence and energetic business-habits to JOIN the ADVERTISER in the PROPRIETORSHIP and WORKING of a FLAG QUARRY in NORTH WALES, the produce of which can be sold to an unlimited extent in the metropolis and all the large towns in England. The quarry is ready for profitable operation on a large scale, and will make an immediate return of at least 50 per cent. clear profit. The flags, self-faced (equal to a planed surface), can be had of any size, from 3 to 15 feet in length, by 1 to 6 feet in width, and varying in thickness from 1 to 4 inches. As the induction into the undertaking of influential and effective co-operation in the selling department is the great desideratum, a moderate sum will be taken for an incomer's interest.

Apply to J. Bywater, 44, Dale-street, Liverpool.

TO AGRICULTURISTS.—IMPROVEMENTS IN THE PREPARATION OF MANURES.—AGRICULTURISTS are INVITED to take SAMPLES of MANURES (Stones's Patent Huminate), free of expense, at the office of the GENERAL PEAT WORKING AND MANURE COMPANY, 6, JOHN-STREET, ADELPHI, LONDON.—The Patent Huminate is free from filthy matter; it consists entirely of concentrated decomposed vegetable organic substances, soluble humic acid, fixed salts of ammonia, with other ingredients, according with soil, plant, and climate. It will promote vegetation in all its requirements, and invariably improve the soil, and can challenge the best guano, at one-third the cost.

To every scientific person, or practical farmer (however deficient in knowledge of chemical science), who inquires into the composition of these manures, the folly of bringing guanos to England, even though they cost but one quarter the price now paid for them, will appear most undeniably.

Samples may be had on application at the *Mining Journal* office, 26, Fleet-street.

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., MINING SHAREBROKERS, 58, LOMBARD-STREET, LONDON, Beg to draw the attention of Capitalists to their REGISTRY for the SALE and PURCHASE of SHARES.

SHARES FOR DISPOSAL.

Devon Great Consols	Whcal Mary Ann	South Caradon
Carn Brea	Wellingtons	Great Wheal Sheba
West Caradon	West Buller	Trevisksy
Trelawny	Tolgus	Bedford United

N.B.—Statistical information furnished on British and Foreign Mines.—No CHARGE made for the registration of shares unless business be transacted.

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, renews his OFFERS of SERVICE to CAPITALISTS seeking the means of SECURE INVESTMENTS, which can be made to yield an annual income of 15 to 20 per cent.,

MR. CROFTS HAS SPECIALLY FOR SALE—

Trethevy (2 shares)	Llwynmalees (10 shares)
Wheal Trescoll	Warleggan Consols (20 shares)
Holmbush (5 shares)	South Tamar
Bodmin Consols	East Tamar
Herodsfoot	Bedford United
Wheal Tremar (20 shares)	Hennock (45 shares)
Boringdon Park (3 shares)	Linares (50 shares)
New East Crowndale (20 shares)	Wheal Augusta (20 shares)
Allt-y-Crib (10 shares)	West Wheal Virgin (20 shares)
Bronfloyd (70 shares)	Wheal Russell (10 shares)

The improving condition of mining property, and the probability of its increase with the favourable state of the money market, induces Mr. CROFTS to recommend capitalists to seek out *bonâ fide* mines for investment, of which there are abundance, both dividend and non-dividend. In the former 15 to 20 per cent. interest per annum may be realised.

Mr. CROFTS will be happy to give the best advice his experience enables him for the guidance of his friends, and transacts business only for principals.

No. 4, King-street, Cheapside, July 19, 1851.

GENERAL MINING OFFICES.

23, *Threadneedle-street, London.*

MR. JOSEPH JAMES REYNOLDS, late of CAMBORNE, CORNWALL, begs to inform his friends and the public that he has COMMENCED BUSINESS as a MINING and GENERAL AGENT at the above office, and trusts, by paying a due regard to the welfare of his clients, that he will at all times merit their confidence. Having been connected with the management of mines in the most productive districts of Cornwall upwards of twenty years, and being in communication with some of the most respectable agents in the mining districts, Mr. Reynolds will be enabled at all times to furnish such information as may be relied on.

J. J. REYNOLDS will carry on business upon COMMISSION ONLY, making no intermediate price between buyers and sellers, and will be ready at all times to introduce the buyer and seller of any shares to each other.—Office hours Ten to Four.

FRANCIS'S MINING OFFICES, 7, JOHN-STREET, ADELPHI.—The great importance of the Mining Interest at the present moment renders it necessary that every means should be adopted to place its operations on the plainest and fairest foundation

The system of representing the VALUE of MINES, by describing them as DIVIDEND or NON-DIVIDEND PAYING, is by no means sufficiently explanatory of their real qualities, for it is clear that mines may come under the first denomination which, nevertheless, differ greatly in value: for instance, some continue to divide large profits for a long time, and some in like manner small profits only, whilst there are others which pay dividends, large or small, as the case may be, but only for a very limited period. The selection of mining ground also requires the greatest care, which, in most instances, can only be applied by or through agents, qualified by long and successful practical experience, combined with local geological knowledge.

Mr. MATTHEW FRANCIS, who has, during the last 20 years, without intermission, been engaged as Manager of Mines abroad, as well as in Cornwall and Wales, many of which are making large profits, takes leave to announce, that he has OPENED these OFFICES, where he may be consulted daily from Eleven till Three.

N.B.—Information supplied, without favour or prejudice, as to the present condition and prospects of all mines without distinction, as far as can be ascertained by the closest attention to the best sources of knowledge.

*** The TRANSFER of MINING PROPERTY (such only as is legitimate) negociated on satisfactory terms.

MINING INVESTMENT.—A LIMITED NUMBER of SHARES will BE DISPOSED OF to respectable parties on very MODERATE TERMS, in one of the most promising, productive, and best situated, SILVER-LEAD MINES in CORNWALL—nearly £7000 worth of ores having been raised above the 25 fathom level, and two other levels, a 35 and 45, unwrought, just coming into operation.

Apply to Mr. Richard Thomas, Mining Agency Office, 8, George-yard, Lombard-street.

MR. EVAN EVANS, MINE AND QUARRY AGENT, returns his thanks to those gentleman who have confided in him: he is now at TYN-Y-WORGLOD, near CARNARVON, NORTH WALES.—LETTERS of INSTRUCTION will reach him at PEN-Y-GROES POST-OFFICE.

MR. JOHN DAVIES, MINING SHAREBROKER, *No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.*

MR. ALFRED SENIOR MERRY, DEALER IN COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address: *LEE-CRESCENT, BIRMINGHAM.*

MR. THOMAS JORDAN, METAL BROKER, No. 75, OLD BROAD-STREET, CITY, exclusive AGENT for one of the BEST MAKERS of HAMMERED IRON, for MARINE, LOCOMOTIVE, and other ENGINES. Also AGENT for the SALE of SOUTH STAFFORDSHIRE and WELSH BAR, BOLT, and BOILER PLATE IRON, in all its varieties.

The Proprietors of Lead and Copper Mines in Devon, Cornwall, Wales, &c., will find great advantage in the quality and cheapness of the Iron they require, by seeking quotations through the Advertiser.

MINING SHARES.—Mr. HENRY VATCHER, EXETER, OFFERS his ADVICE and ASSISTANCE to PARTIES willing to INVEST in the ABOVE SECURITIES. Ten years' residence in Exeter, together with periodical visits to nearly all the Mines in Devon and Cornwall, enables him to become thoroughly acquainted with their respective merits.—Mr. VATCHER has at his command, at all times, practical and experienced agents, so that if any inspection is required, the same can be done without delay.

MINING AND RAILWAY OFFICES, No. 3, CASTLE-TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY and MINING SHAREBROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION OF PROPERTY; and will be happy to point out a selection of such stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged.

MINING OFFICES, No. 75, OLD BROAD-STREET.—Mr. T. P. THOMAS begs to inform his friends that he has REMOVED from No. 3, George-yard, to the ABOVE ADDRESS, where he hopes to receive a continuation of their favours.

MINING OFFICES, No. 51, THREADNEEDLE-STREET, LONDON.—T. FULLER & CO. beg respectfully to inform the Public that they are in a position to BUY and SELL in all the DIVIDEND-PAYING MINES, and have on hand Devon Great Consols, Bedford United, Wheal Mary Ann, Trelawny, Great Wheal Friendship, West and South Caradon, &c.; also in several YOUNG MINES, which are approaching to a dividend state, and will take pleasure in furnishing all particulars connected therewith, either personally or by letter.

MINING OFFICE,—3, GEORGE-YARD, LOMBARD-STREET.—Messrs. TREDINNICK & CO. (formerly of Three Kings-court and 52, Threadneedle-street, London) beg to inform their numerous Friends that they have RESUMED BUSINESS at the ABOVE ADDRESS, of PURCHASING and SELLING SHARES in MINES, RAILWAYS, and other PUBLIC COMPANIES, as well as the NEGOTIATION of every description of MONETARY MATTERS, together with COMMISSION BUSINESS in GENERAL.

MESSRS. TREVARTON AND CO., MINING SHARE DEALERS AND BROKERS,

5, ST. JAMES'S-STREET, PALL-MALL, LONDON.

MR. PEET, MINING AGENT, 48, THREADNEEDLE-STREET, is now prepared to OFFER his SERVICES in the FORMATION of MINING COMPANIES, on the Cost-book System; and also to CONDUCT the LONDON AGENCY of those already established. His offices are advantageously situated. Satisfactory references can be given.—London, April 5, 1851.

MINES.—MOLYNEUX & CO., MINING and GENERAL SHARE AGENTS, 34, THREADNEEDLE-STREET, 6, FINSBURY-PLACE SOUTH, and 6, WEST-STREET, FINSBURY-CIRCUS, have SHARES ON SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to CAPITALISTS the safest and most unexceptionable investment.

MOLYNEUX & CO., grateful for past favours, beg to call the attention of their friends to their newly-occupied OFFICES, No. 34, THREADNEEDLE-STREET, where every attention will be paid to the PURCHASE or SALE OF SHARES.

*** Office hours from Ten to Four o'clock.

ASSAY OFFICE AND LABORATORY, 23, HAWLEY-ROAD, KENTISH TOWN—conducted by Mr. MITCHELL, F.C.S., author of "Manual of Practical Assaying," &c.—Mr. MITCHELL begs to inform the Mining and Manufacturing Public, and Bullion and Metal Brokers generally, that he continues to conduct ASSAYS and ANALYSES of MINERALS, METALS, SOILS, and FURNACE and all other MANUFACTURING PRODUCTS.—ADVICE to PATENTEES and MANUFACTURERS on all MATTERS involving a knowledge of Chemistry.

INSTRUCTION, as usual, in ASSAYING, ANALYSIS, and METALLURGICAL and MANUFACTURING CHEMISTRY.—23, Hawley-road, Kentish Town.

PARTNERSHIP.—The ADVERTISER is in WANT of a PARTNER (sleeping or otherwise) in a BONA FIDE CONCERN, yielding 50 per cent. clear profit; the sum required £600—one-half of which will not be required for 3 or 4 months.—Apply by letter, addressed to Box C., 46, Post-office, Liverpool.

FOR SALE,—A 33-inch STAMPING-ENGINE, has been used for pumping and winding, nearly as good as new, of the following dimensions:—Cylinder 33 inches, with steam jacket and case, 6-ft. stroke, with strong driving shaft, and fly wheel about 7 tons; cast-iron spring beams, entablature, and massive cast-iron columns. Original cost, £1800; will now be sold in perfect repair for £400, nett cash.—Apply to Mr. Robert Williams, 16, Old Broad-street, London.

ON SALE, at the CAETAN-Y-GRAIG MINE, near the Westminster Mines, MOLD, a CONDENSING STEAM-ENGINE, 21-inch cylinder, 5-feet stroke, with bright hand-gear, &c., nearly new, and in excellent working condition. Also, ONE BOILER, 20 feet long and 3 ft. 9 in. diameter, with steam and feed-pipes connected to the engine.—Application to be made to Mr. William Clemence, Westminster Mines, near Mold; or to Mr. W. B. Dyer, Mold, Flintshire.—June 18, 1851.

TO BE LET, for any term of years the taker may desire, a SLATE QUARRY, at WELLTOWN, within a mile of the Harbour of Boscastle, now in the occupation of Mr. Avery, of Boscastle, the proprietor, to whom applications may be made.—Boscastle, May 19, 1851.

NORTH TAMAR SILVER-LEAD MINE.—Mr. J. LANE, No. 52, THREADNEEDLE-STREET, CITY, has FOR SALE SHARES in the ABOVE MINE.—July 11, 1851.

THE WELSH POTOSI.—To BE SOLD, FIVE HUNDRED (2000ths) SHARES in these celebrated MINES.—Applications, until the 31st inst., to be made to Matthew Francis, 7, John-street, Adelphi, London, where all information respecting the same may be obtained.—July 7, 1851.

CHYPRASE CONSOLS TIN AND COPPER MINE, situated in the Parish of ST. ENODER, CORNWALL.—APPLICATIONS may still be made for the FEW REMAINING SHARES to the Purser, Mr. Thomas Lewis, 17, New Meeting-street, Birmingham; also to Augustus Yeates, Esq., solicitor to the Company, 77, New Hall-street, Birmingham; of whom prospectuses, reports, and all other information may be obtained.

GREAT BRYN CONSOLS COPPER AND TIN MINE, Situate in the parish of WITHEL, near BODMIN, CORNWALL.

Applications for the remaining shares to be made to the Committee of Management; or to Mr. Lelean, No. 5, Crosby-hall Chambers, Bishopsgate-street, London.

OKEL TOR SILVER-LEAD MINE.—The Promoters of this Mine being desirous that it should be carried out in a legitimate and business-like manner, with the spirit of prudence and economy, have made ARRANGEMENTS with Mr. EVAN HOPKINS to FORWARD regular COPIES of the RECORDS of their PROCEEDINGS to his OFFICE, 13, Austinfriars, in order that this Gentleman may not only from periodical inspection, be able to judge of their progress, but be made acquainted also with their daily operations, for the satisfaction of distant capitalists who may consult him.

There are a few shares remaining for disposal, applications for which must be made to Mr. J. JURY, the secretary, 3, Castle-terrace, Exeter.

CAMERON'S COALBROOK STEAM COAL, & SWANSEA AND LOUGHOR RAILWAY COMPANY.—[Registered and Incorporated.]

Notice is hereby given, that the ANNUAL GENERAL MEETING of the registered proprietors of shares in this Corporation will be HELD at the Company's offices, 2, Moorgate-street, London, on Wednesday, the 30th day of July inst., at Twelve o'clock at noon, precisely, for the purpose of receiving the directors' reports, and for the transaction of other business, as expressed in the Deed of Settlement and Act of Parliament incorporating the Company.—Shareholders in arrear of call are disqualified from voting at the meeting.

By order of the Board of Directors,

A. C. HOWDEN, Secretary.

Company's offices, 2, Moorgate-street, London, July 12, 1851.

NOTE.—The Transfer Books will be closed from the 20th to the 30th July inst., both inclusive,

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that a DIVIDEND of FOUR POUNDS per share, exclusive of income tax, will be PAID to the holders of certificates in this company, at the office of the association, 26, Austinfriars, on and after Thursday, the 24th day of June inst., between the hours of Eleven and Three o'clock. The proprietors are requested to leave their certificates at the office for examination three clear days before day of payment.

By order of the Court of Directors,

26, Austinfriars, July 17, 1851. WM. LECKIE, Secretary.

HOLYFORD COPPER MINING ASSOCIATION.—The ORDINARY GENERAL HALF-YEARLY MEETING of shareholders in the above Association will be HELD at the office, 34, Great Winchester-street, on Wednesday, the 30th July inst., at Twelve o'clock noon, for transacting the ordinary business of the Association.

And notice is hereby given, that at the termination of the above ordinary meeting, a SPECIAL MEETING of shareholders of the Association will be held, for the purpose of deciding on a proposal for the dissolution and winding-up of the Association.

London, July 16, 1851. J. W. BUCKLAND, Jun., Sec.

LINARES MINING ASSOCIATION.—An ESPECIAL GENERAL MEETING of the shareholders will be HELD at the offices of the Association on Wednesday, the 30th inst., at One o'clock precisely, to consider the necessity for the immediate Registration of the Company, in accordance with the Act of Parliament.—2, New Broad-street, July 16, 1851. G. EATON, Secretary.

*** The dividend on the preference shares, due the 16th inst., is now in course of payment at the office.

ROYAL SANTIAGO MINING COMPANY.—The Directors of this Company hereby give Notice, that they have made a CALL upon the shareholders of TWO POUNDS per share, to be PAID to Messrs. Glyn and Co., the bankers of the Company, on or before the 15th day of September, 1851.

By the terms of the agreement constituting the Company, all shares of those proprietors who do not pay the said call of £2 per share within 30 days after the said 15th of September, will be absolutely forfeited.

The form to make the payment will be delivered upon application at the office of the Company.—38, Broad-street-buildings, July 9, 1851.

THE AUSTRALIAN MINING COMPANY—(OFFICES REMOVED from Adelaide-place to 19, BIRCHIN-LANE).

The Board of Directors hereby give Notice, that agreeably to the provisions of the Deed of Settlement, the SIXTH ANNUAL GENERAL MEETING of the shareholders of this Company will be HELD at the London Tavern, Bishopsgate-street, on Monday, the 28th July inst., at Twelve o'clock precisely, to receive the report, accounts, and balance-sheet for the past year; to elect two directors, in lieu of two who go out by rotation; and to fix the remuneration of the present auditors for the past year.

July 11, 1851. T. W. PLUM, Secretary.

TINCROFT MINING COMPANY.—At the ADJOURNED GENERAL MEETING of shareholders, held at Salvador House, Bishopsgate, on Thursday the 17th July,—

It was moved by Mr. Field; seconded by Mr. Tyrie—

And resolved,—That the report of the Committee of Investigation, giving in the opinion of this meeting a most erroneous view of the state, prospects, and management of the mine, and also having entirely failed to substantiate the grave charges therein made against the directors, this meeting do now adjourn.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors of this Association will be HELD at the office of the Company, No. 5, Finsbury-circus, on Wednesday, the 30th July inst., at One o'clock precisely, when the Election of two Director, in the room of Sir John Easthope, Bart., who resigned, and Thomas M. Flockton, Esq., deceased, and also two other directors, and one Auditor, who go out by rotation, will take place.

Directors going out by Rotation—James Mackillop, Esq., and Joseph Tasker, Esq.

Auditor going out by Rotation—John Hibbert, Esq., jun.;

and who, being eligible thereto, are candidates for re-election.—The transfer books were closed on the evening of the 12th, and will be re-opened on the 31st inst.

By order of a Court of Directors,

5, Finsbury-circus, London, July 14, 1851. JOHN MATHER, Secretary.

UNITED MUTUAL MINING AND GENERAL LIFE ASSURANCE SOCIETY.—Notice is hereby given, that the SECOND ANNUAL GENERAL MEETING of the members of this Society will be HELD at the offices of the Society, 54, Charing-cross, London, on Tuesday, the 22d day of July inst., at Twelve o'clock precisely, for the purpose of transacting the ordinary business of the society, and for the election of three directors and one auditor, in place of the same numbers, who will retire.

By order of the Court of Directors,

THOMAS PRITCHARD, Resident Director.

London, 54, Charing-cross, July 10, 1851.

WEST WHEAL JEWEL MINING ASSOCIATION.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders will be HOLDEN at the offices, as under, on Tuesday, the 22d inst., at Twelve o'clock precisely, for the purpose of Electing two Members on the Committee of Management, in the room of Richd. Harvey, Esq., and Capt. John Richards, who have resigned.

57, Old Broad-street, July 3, 1851. WM. NICHOLSON, Secretary.

A Compendium of British Mining.

BY J. Y. WATSON, ESQ., F.G.S.

ST. IVES CONSOLS TIN MINE.

This sett has been worked for upwards of 30 years, and made large profits. Owing, however, to the low price of tin, and heavy cost of working, the profits of late years have been small. The shares being principally in the hands of private individuals, the statistics would not be of much interest to the public, even if procurable; but the formation of tin ore in the mine is so peculiar, that I give it at some length. The formation is called a *carbona* (generally termed a dropper from a lode in irregular masses), which joins the standard lode at a depth of about 80 fms., and the part by which it is united is not more than a few inches square. From that place it has been worked, perhaps, 120 fathoms in a south-easterly direction, until, tending continually downwards, it reaches a depth of nearly 100 fathoms. Its greatest height is about 10 fms., and its largest breadth about the same; but the average dimensions may be 4 fms. high, by 10 or 12 feet wide; its bulk, however, is subject to very great irregularity.

St. Ives Consols exhibits few of the usual characters of a lode, as it is bounded above, below, and on either side, by the usual granite; and it has an irregular dip of from 45° to 80° towards the south-west. It is chiefly composed of felspar, quartz, schorl, and tin ore, but in many places it contains fluor chlorite, common and blistered copper pyrites, iron pyrites, and vitreous copper ore. About 80 fms. from the lode, it falls in with, and takes the direction of, the *middle trawn*, and they continue side by side (the *carbona* on the west) for about 25 fms. The *carbona* then becomes a little mixed with the substance of the *trawn*, and in a few fms. farther, the very felspathic disintegrated granite of which the latter is composed is gradually entirely replaced by a mixture of schorl, quartz, and tin ore, closely resembling the composition of the *carbona*, as long as the direction continues that of the *trawn*. At length the *carbona* takes a bend, and goes off at right angles towards the north-east, whilst the *trawn* continues its course, and gradually becomes more granitic, although it still retains traces of the *carbona* for some fathoms; but at last it reassumes the felspathic and disintegrated characters common to the *trawn*. Immediately east of the *trawn*, the *carbona* increases to enormous dimensions, and is worked for at least 10 fms. in length, breadth, and height. The scattered lights, the great number of miners in their soiled and torn working dress, the pillars and beams of wood which support the roof and walls, the rock lining this vast cavern, all dimly and at intervals discerned by flickering and uncertain gleams, produce a very striking and uncommon effect.

From this large mass, shoots, branches, pipes, bunches, and other irregular protuberances, strike off in every direction; and wherever there is an unusual enlargement of the *carbona*, it is invariably found to occur at the crossing or union of two or more of these, which may be called the *limbs*. Some of them bear about east and west, and two of them, called Williams's and Kempe's lodes, have rather more resemblance to veins than is usual in the *carbona*; but these are for the most part cut off by the granite above, below, and at either end, and these abrupt terminations are often not on joints in the rock. Some of these bunches pass off diagonally from the main body, and, when followed, lead to other strings, which are extremely irregular in their direction, and are also cut out by the granite. These again send off shoots, which also often open into short vein-like masses, and these may, in their turn, throw off strings, both to the *carbona* and to its subordinate branches. Throughout there is a regular mineral transition from the substance of the *carbona* to the contiguous granite; and the composition thereof, like that of the lode, seems equally to depend on the nature of the country. For where the granite is cross-grained, with large crystals of white felspar, there is but little tin ore; and this, on the contrary, abounds where the granite is more uniform in its aggregation, and the felspar crystals pink or pale green, and not very clearly defined. The whole may be described as a network of pipes, strings, branches, shoots, and veins, converging into one grand trunk, which extends to the south-east, and dips, in the same direction, about 1 in 6; on all sides surrounded by the hard granite, but nowhere extending to the surface.

UNITED MUTUAL MINING AND GENERAL LIFE ASSURANCE SOCIETY.

We are happy to find that this society, established in August, 1849, is progressing satisfactorily, and may now be considered as based on principles conducive to its permanent success. The number of policies issued during the first year up to May, 1850, was 167, and the amount assured 49,350*l.* During the past year, to May, 1851, there have been received, and completed, 223 policies for the amount of 66,668*l.*, making the total 390, and the sum assured 116,018*l.* Lapsed income to the amount only of 173*l.* have occurred, while but one death has taken place, and that involving a payment of only 100*l.* There are other assurances accepted on which the premiums have not yet been paid, making upwards of 400, realising an income of nearly 4000*l.* per annum. The second annual meeting takes place on Tuesday, a report of which will appear in our next week's Journal.

LIABILITY OF SHAREHOLDERS—IMPORTANT CASE.—In the Court of Queen's Bench, last week, an action was brought to recover the sum of 2318*l.*, being the amount of the calls upon 1025 shares, with interest, of which the defendant was the holder, in the North American Colonial Association of Ireland. The calls had been duly made, and notice thereof given to the defendant; but, before the day of payment came, the defendant transferred his shares, and then denied his liability.—In the course of the case, Lord Campbell expressed his opinion, in accordance with a decision of the Court of Queen's Bench, that if the defendant was a shareholder at the time when the calls were made he was still liable, though he might have transferred his shares before the time of payment arrived.—Mr. Whately said, the Court of Common Pleas had decided otherwise; and as the facts on both sides were admitted, and the question intended to be raised was not on the record, the better course would be to tender a bill of exceptions to his Lordship's ruling. He would do that with the greatest respect to his Lordship's opinion.—Lord Campbell said, there could not be any objection to that course. His opinion was quite clear upon the subject, for the Act of Parliament said that all that was necessary to support an action for calls was to prove that at the time of making the calls the defendant was the holder of one or more shares, and that notice of the calls was given. That was all that was necessary to be proved; and, in this case, these facts were admitted. He did not think the Legislature intended that a shareholder might get rid of his liability by merely assigning away his shares after the calls were made.—Mr. Whately then tendered a bill of exceptions, stating that the defendant was freed from his liability by the transfer of his shares before the day appointed for the payment of the calls, and that his Lordship directed the jury that he remained liable, notwithstanding the transfer of his shares.—Lord Campbell then directed the jury to find a verdict for the plaintiffs, and added that if the defendant could thus evade his liability, it would leave the directors without the means of paying the surveyors and solicitors the amount of their bills, as well as the contractors who had done work for the company.

M. DAGUERRE (the celebrated discoverer of the daguerreotype), died nearly suddenly at Brie, a village near Paris. M. Daguerre distinguished himself early as a scene painter by the happiness of his effects of light and shade: the Chapel of Glenthorn, at the Ambigu, the Rising of the Sun in Les Mexicains, were saluted by the audience with enthusiastic applause. His inventive genius then erected the Diorama: everyone remembers the series of enormous pictures of cathedrals, of Alpine scenery, producing almost the effect of illusion upon the spectator, and diversified by magical changes of light, which M. Daguerre exhibited in the Regent's-park. Later, he succeeded in immortalising his name by fixing the images of the camera obscura, and realising in an instant effects which leave at an immeasurable distance the most elaborately finished engraving.

NEW ECONOMY IN STEAM.—Patents have lately been taken out in nearly all the large states of Europe for a discovery which, if it realises only one-fourth of what the inventor promises, will cause a total revolution in the application of steam. The patentee, who is an American engineer of great celebrity, professes to have perfected an engine by which the steam, instead of passing off in a half-consumed state, deposits its caloric and recovers new power, thus effecting an economy of 90 per cent. The idea on which the invention is founded appears to have been borrowed from the respirator worn over the mouth by consumptive persons, and in which the caloric of the breath, instead of being lost in the atmosphere, is arrested by metallic meshes and warms the cold air taken into the lungs. The experiments already made by the inventor have, it is said, proved sufficiently satisfactory to induce him to construct an engine of 100-horse power, which will shortly be in operation.—*Galignani's Messenger.*

HOLLOWAY'S PILLS, AN ADMIRABLE REMEDY FOR THE CURE OF LIVER COMPLAINTS AND BAD DIGESTION.—Mr. Wilson, a gentleman lately returned from Bengal, where he had been employed for several years in the Hon. East India Company's service, called at Professor Holloway's establishment a few days ago to state the benefit he had received from taking these unparalled pills, having suffered from a liver complaint for years, with a digestion so impaired that for months he could not make use of any solid food. Other remedies seemed to have no effect on the disorder, but Holloway's pills acted so wonderfully in cleansing the liver and strengthening the digestive organs, that he is now quite restored to health. Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

Original Correspondence.

THE SPIRIT OF CONTROVERSY, AND THE SPIRIT OF ENTERPRISE, AS APPLIED TO MINING PROGRESS.

"Call spirits from the vasty deep."

SIR,—As the presiding Corypheus of your eminently useful Journal, it must be generally admitted that you *have* called long and lustily, but, thanks to your perseverance, we may now say, not in vain, for you have herein at length produced the manifestation of two most potent spirits,—the spirit of controversy, and the spirit of enterprise! In their useful and legitimate capacity they are alike powerful, instructive, and creative; but when they indulge their perverse and selfish propensities, they beget a thousand evils, and degenerate into mere instruments of malevolence and a common subversion. Possessing then, as they do, two great leading qualifications, so diametrically opposed to each other, it behoves us to watch their progress with a jealous care and solicitude; and whilst we endeavour to impose a wholesome restraint on the one, to do all that lies in our power to advance and encourage the other.

Controversy is, however, essentially a contentious spirit; and it cannot, therefore, be expected to be governed by a sage and stringent code of rules and regulations; for that would be only to destroy its very essence, and put an extinguisher on the scintillations of sprightly wit, the pungency of lively satire, and the searching animadversions of wholesome criticism. But, with truth for its aim, and a genuine benevolence as its guiding principle, it will never materially deviate from those distinguishing characteristics which constitute the true Christian, or the accomplished scholar. Some of your correspondents have of late complained much that certain of the controvertialists, who have for the last few weeks so prominently occupied the columns of the *Mining Journal*, have descended to rather intrusive personalities, and such are certainly reprehensible; but I think it must be acknowledged, that though the winds of contention may have blown up a tolerable proportion of *chaff*, they have also laid bare a very fair sprinkling of good and useful grain. It is the very nature of controversy often to bring forth much good out of evil, to discover latent worth, where all looked barren and infertile, and to extract some valuable truth out of the most unpromising and unseemly channel of communication. Let us, then, rather hail with satisfaction and encouragement this pregnant and invigorating spirit, and earnestly hope it will continue to increase in volume and usefulness, ever bringing forth many a glorious truism from the mystical and unexplored regions of chaotic darkness to the golden sunlight of order and system.

Perhaps one of the most manifest of the abuses which creep into controversial writing is that of misrepresenting and subverting the sense and meaning of an opponent, and which we sometimes see considerably enhanced by partial quotations, or a literal misquotation. Such malpractices are not only in themselves a most censurable derogation from the legitimate course of argument, but are productive of the greatest inconvenience, and are alike vexatious to the reader as to the writer, for much more time and space is often occupied in explanations and counter-statements, on this head, than would be requisite to develope and settle the point at issue. In the late slight recontre between Mr. Coxworthy and myself, I am sorry I cannot quite acquit that gentleman of a little delinquency or two of this kind, though I dare say it was quite inadvertently done on his part. In adducing the septaria-like appearances in certain portions of Mount Calvo, Italy, in illustration of the crystalline theory of mineral lodes, I did think, as subsequently remarked by one of your intelligent scientific correspondents, that I "had brought forth irresistible evidence of the incompatibility of veins being filled either from below or from above, and the impossibility of the existence of *open* fractures before the filling." And as yet, I have not seen the slightest reason to deviate from this opinion. The facts I gave were plainly, and I trust intelligibly, stated; but Mr. Coxworthy, in attempting to make them accord the better with his own peculiar views and electric theories, has certainly rather perverted my meaning; however, what is perhaps the more calculated to beget me a generous sympathy, is the fact that he has not only cracked and rended Calvo's adamantine rocks, with the *ice* of his oxygen period, but says he "leaves me and others the more difficult task of filling them up!" This is really rather too bad, especially in one who holds, as it were, "the lightning in his fist," and who professedly can dispense at pleasure the ingredients of the laboratory by his ever-ready "directing principle!" Good Dame Nature, however, has considerately filled them up, and I am glad of it, for I could have pretended to nothing of the kind myself. I merely essayed to show that they *were* filled, and by a semipellucid mineral substance suspending now pretty widely assunder the identical angular pieces of rock that had originally been joined together, forming, then, one homogeneous rocky formation; which simple fact is in itself quite sufficient for the establishment of the crystalline theory of fracture lodes; as incontestibly showing that they have been gradually opened by the lateral crystallising force. If Mr. Coxworthy will take the trouble to examine these facts *in situ*, and pay especial attention to the *mechanical structure* of the aggregated masses he may see in any quartzose lode, he will not, I am persuaded, leave them without some new and settled convictions; and am sensible he is not the man to be argued out of a conviction, for which I honour him, as well as for certain personal excellences, and acquirements, one cannot fail to observe through the medium of his writings.

There is an air of unfathomable mystery—a kind of glorious uncertainty—investing most natural phenomena, which is peculiarly inviting to the human mind; and as we proceed in our researches, the startling beauties and unmistakeable evidences of design which gradually unfold themselves to our intellectual view, and exemplify the consummate wisdom employed in the structure and economy of even the simplest and minutest objects of creation, not only insensibly lead us into the most earnest inquiries after truth; but, stealthily, as it were, induce a settled conviction that success will be the reward of our perseverance. It is, however, well for the legitimate progress of science that even facts thus discovered by actual observation should undergo the ordeal of a wholesome and searching criticism. Inquisitive and observant minds, ever intent on the beautiful contrivances and indefinable workings of Nature, are especially prone to indulge in a laudable disposition to speculate and theorise; and though such creative productions are sometimes sufficiently crude and extravagant, there is often much to be gleaned from them that is highly edifying and truly useful.

Mining, as a science, is as yet but in its infancy; and it appears to me that the great business of the present day to be performed by its votaries is the discovery and collection of *facts*, and the collation of received *data*; and the more of these indispensable materials a man can filch from the secret recesses of Nature, and in perspicuous characters place before the world, the more of positive usefulness will there emanate from his labours, and the more will they redound to his own honour and the good of his fellow-creatures. It has been complained that little positive information, as to the mysteries of the mineral kindgom, has been derived from the late controversy; but, whilst we admit much of the correctness of the allegation, we may readily ascribe the chief cause to have been the comparative poverty of materials, the too indefinitely understood workings of the all-pervading, ever-active chemical and electrical phenomena, and the great paucity of actual indispensable data. Some valuable facts, however, have been elicited by the discussion; and for these we are chiefly indebted to the discursory and illustrative deductions of Mr. Ennor and the "Practical Miner."

It is to be regretted that some of the writers, and many others, evidently cannot divest themselves of a disposition to believe that, whilst they are ostensibly in search of order and system, they are actually toiling through labyrinths of interminable intricacy and incoherent irregularities, and that the stately fabric, whose laws and properties they would seek to investigate, is the work of blind chance—a sort of accidental undefinable aggregation of atoms and particles! But no such egregious notions can for a moment be entertained by the true student of Nature. If he, when lifting his eyes towards the transpicuous heavens, does behold there an illustrious chaos of shining orbs, promiscuously scattered through the vast etherial expanse, without apparent order or uniformity, he is, nevertheless, fully conscious that such appearances are illusory. He, right well knows that the Almighty Hand, which launched those stupendous and ponderous bodies, with their mighty continents and boundless oceans, their majestic forests, towering mountains, and multitude of nations, into the realms of immeasurable space, has, by his coercive energy, subjected all their movements to the nicest laws, and that all is regularity, accuracy, and harmony as regards their relative position and economy, even though ever careering with astounding rapidity in their mighty courses through—

> "Mazes intricate,
> Eccentric, intervolved; yet regular,
> Then most, when most irregular they seem."

If he turns his attention to sublunary things, and investigates the humbler and minuter objects of creation, he everywhere, in the leaflet as in the blade of grass, or the delicately-tinted flowret, marks the unerring footsteps of the same All-wise Being; above, beneath, around him, he beholds in every object the most consummate contrivances and the most complete perfections; and from such contemplation, by inductive and analogical reasoning alone, is he led to the inevitable conclusion that the majestic structure he inhabits, evidently created to subserve the purposes of man, is, in reality, alike characterised in all its essential parts by the same extreme niceness and particular exactness, in the adjustment and disposition of its varied and even minutest materials, making up the sum of one grand *finished scheme*, rife with similar manifestations of the transcendant excellencies of its Maker. Surely, then, we are warranted in believing; and as geology with its kindred sciences has gone far to show, that the structure of the earth has been elaborated under the guidance of, and is governed by, a grand series of infallible rules, or "Laws of Nature"—most confirmative of the opinion that mining in all its complicated relations, may, by study and diligence of actual research, be in due time reduced to a *perfect system*.

Hail! then, bright "Spirit of Enterprise;" in these our dubious days especially, it behoves us ever to invoke thy presence, in order to insure success to our toils. In fact, deprived of the stimulating rays of this cheering genius, the whole machinery of active business-life would soon be brought to a dead stand. Methinks, however, the mine is peculiarly the province of this glowing and energetic goddess; in proportion as she most enlivens the dark and devious pathway of the adventurer, so do we, generally speaking, see his persevering efforts crowned with a brilliant success. It is this all-potent spirit, regardless of the barren aspect, or the far-off *locale*, of those hugh towering ranges, which look like the barriers of kingdoms or the boundaries of Nature, that has explored with determined energy and Cyclopian labour their inmost recesses, and dragged forth the treasures sunk deep in the mine, or lodged fast in the quarries. From thence she has conjured the British Palace of Aladdin, which, with its stately framework, unrivalled arrays of metallic pillars, mighty crystal case and marvellous contents, stands proudly forth in all its glittering splendour, as a glorious representative of our native products, and an astounding monument of our national skill and industry. She has thus, in short, covered the whole face of our "tight little Island" with the appliances of successful progress and the elements of a general prosperity.

Ask her, ye wondering denizens of the Continent, to demonstrate the localities of our inexhaustible treasuries, and she will point with pride and exhultation to the now resounding valleys of Southern Cambria, the Pandemonian hills and dales of Staffordshire, the wide-spread plains of Lancashire and Newcastle, with their similarly abounding tracts of coal and ironstone; she will tell you that the grand repositories of copper, lead, and silver, are in the western and south-western borders of mountainous Scotia—that they intersect the picturesque districts of rugged Cumberland, and cleave the heights of the great Penine chain, which rears its lofty ridges through the central portions of northern England—that the carboniferous ranges of North Wales abound in lead ore, Snodonia in its copper mines and quarries of slate—the more central mountain regions, including Cardiganshire as of highest fame, well meriting for their abundant *silvery* products the *soubriquet* of the British Potosi; whilst the green swelling hills and sequestered vales of Devon and Cornwall teem with the glittering productions of the mine! Insomuch, that our enterprising brethren of the *west* are, I believe, quite satisfied to concede it as a fact, that all "the wise men come from the *east*," if we will but allow their *little peninsula* to be the grand metallic storehouse of the nation! Of copper and lead they have a noble display, but, be it known, their native pride is considerably enhanced, because they have got a little *tin!*

In the above cursory allusion to our principal mineral deposits, it is unnecessary to say that we have omitted to name a variety of other such products as well as many noble fields—not only in Great Britain but in Ireland, where, more especially, they await only the *purse of the capitalist* and the "*spirit of enterprise*" to convert them into sources of inexhaustible wealth and prosperity. It is sad, indeed, to see, as we sometimes do, these two indispensable auxiliaries employing and wasting, for the most part, most uselessly, their life-giving energies in exploring the mineral tracts of foreign lands; whilst the vast unwrought treasures so well known to be stored up in the bosom of our own smiling hills, and plains, and valleys, offer to the adventurer far greater facilities, and more certain rewards, than is afforded in a similar space of territory by any other portion of the globe. It behoves every one, therefore, who has the prosperity and happiness of his own highly-favoured sea-girt lands truly at heart, to lift up his voice, or to wield his pen, and in the true spirit of patriotism, call the national attention to these all-important but hidden sources of native strength and glory. To remind it that it is *mining progress* speeds the *plough*, and makes the *shuttle* fly merrily round—that from the miners' toil emanate the apposite and manifold appliances of all-wondrous steam, by land and sea—that it is he who produces the iron road for the "flying car," and hath laid the pathway for the lightning—the "railway" for the mind; and he is, therefore, incontestably the mainspring of all their marvellous and multitudinous realisations! considerations alone, which renders the study of mineral development a noble and an eminently useful pursuit; and as touching this engrossing subject, we may well indeed hope that the pregnant spirits we invoke, will continue to hover around our labours, and give new energy to every praiseworthy effort; and if they do sometimes flag and droop a little the wing of hope and enterprise, as of late they have somewhat done, may it be only to soar upwards again on strengthened pinions, and to proclaim a more abounding prosperity. Whilst let us who love to pry into the secrets of Nature, or to ransack her well-stored treasuries, pursue with all due diligence our respective callings; and whether we be students or labourers in the practical or speculative departments, let our great end and aim be truth, the public good, and a due recognition and knowledge of "Nature's laws," which, by Englishmen especially, may be regarded as the *golden keys* of the grand storehouses of individual and national aggrandisement. But as thus engaged, whether in the acquirement of wealth or knowledge, or in the actual investigation of the physical laws of Nature, let us never be unmindful that there is a duty we imperatively owe each other, in the due exercise of the "moral law of Nature"—even the "*law of kindness.*"

July 16, 1851. JOSEPH HOLDSWORTH.

ORIGIN OF MINERAL VEINS.

SIR,—I have watched the progress of the discussion still going on in the columns of your valuable Journal, in reference to the origin of mineral veins, with deep interest, and as the question yet remains unsolved to the satisfaction of the disputants themselves, you will perhaps consider my view of the subject worthy of their consideration, and that of your readers generally. In a sectional point of view the question is one of considerable importance, as affecting practical mining, and it becomes infinitely more so when taken in connection with the cosmological principle of causation, from which the hypothesis I am going to give is deduced. The question is a cosmological one, and can only be fully and fairly discussed upon that basis; and, though the columns of a newspaper are rather limited for the discussion of a subject standing on so broad a field, yet sufficient may be said to lead the mind to closer enquiry and more satisfactory conclusions. Those of your readers who are conversant with the history of the science of geology will remember (for geology as a science has only been established within the period of the present generation) the fierce disputes which took place between the advocates of an *igneous*, and an aqueous theory of the origin of the crust of the earth. Both had good reason for the foundation of their argument, and yet it seems neither party could claim exclusive possession of the field to rear their standard of victory.

Geologists are now, I think, generally satisfied that both these causes—viz.: fire and water—have combined to produce the phenomena they have witnessed, but it is not so clear to them how these agents have been employed in the great laboratory of Nature to give the present varied constitution of the shell of the earth. I, therefore, with your permission, take the opportunity which the discussion of this question offers, of placing before the minds of scientific and practical men, the hypothesis which I think will lead to an easy and natural solution.

I am taught to look upon the globe as being an emanation from the sun in the form of a gaseous bulb, having originally a thin crust of matter in a state of vitreous fusion—similar, in fact, to a globe of glass projected from a blowpipe, both being inflated by gas, and both being in a similar condition when first formed. Thus, then, the earth, and not only the earth, but all other globes in the universe, are mere gaseous bulbs, with a crust or shell, varying in thickness and constitution, according to their magnitude and period of existence. Hence it is that we find, by the study of geology, the first order of rocks (granite) has once been in a vitreous state, and the matter of which they are formed has gradually cooled down to the plastic

and finally to the universal state. When the nucleus of the earth was first evolved it was excessively *hot*, as can easily be imagined, and in this state being projected into a distant region of space, which is everywhere replete with *cold* ether, the two extremes of heat and cold would generate steam, and this steam accumulating upon the body of the globe would, by the natural process of rain, produce an aqueous envelope; and hence we find an aqueous or sedimentary rock succeeding the granite formation. Following this process, we come to a period when the water has attained its maximum, and then it gradually subsides, or dries up, when the inequalities in the bed of the ocean as gradually show themselves, and the globe assumes a terraqueous character. Still progressing, and the vital principle generating as she proceeds, the earth becomes a theatre of life, with the past of which the science of geology acquaints us, and the study of past and present will enable us to read the future. Thus we have a general but still a very limited view of the process of inimitable Nature in the laboratory of the earth, the comprehension of which seems absolutely necessary before we can form a theorem of the subject in question.

Taking the hypothesis here described for my guide, I am brought to the conclusion that *mineral veins* have been produced by the exudation of the internal *hot* gas through the terraqueous crust of the globe, and the character of the mineral will be found to vary according to the constitution of the strata through which it has passed. Such I believe to have been the origin of mineral veins, and if I am correct, though miners may come at *shifts* and *breaks* in a vein, by reason of erupted masses, or a change in the character of the stratum, they will never be able to reach its source. To show that I am not altogether singular in this view of the earth, I may state that Sir John Herschel expresses his opinion, in his *Treatise on Astronomy*, that the *sun is inflated with gas*, and is *even now* excessively *hot*; and Sir Charles Lyell, in his *Principles of Geology*, conjectures that the interior of the earth is filled with gas, and further, he estimates the thickness of the crust by increasing gradations of heat from the exterior to the interior, to be about 200 miles. It may not be found by actual experience, as your correspondent, Mr. Lake, seems to deny, that the heat regularly increases as we proceed inwards, because the heat may be modified by contiguous veins of cold water, or other local causes; but, as a general rule, I believe the greatest attainable depth will give the greatest degree of heat.

The violent action of the central gas has evidently been much mitigated by time and the consolidation of the earth's crust; but it is yet sufficiently powerful, especially about the equator, to produce earthquakes, volcanic eruptions, and such like phenomena, at the present time.

I have now given a very brief outline of what appears to me the origin of mineral veins; and if I am in error, I am always happy to learn the truth—the only object I have in view.—COSMO: *London, July* 16.

THE MINERAL VEIN QUESTION.

SIR,—It is due to your talented and respectable correspondent, Mr. F. Coxworthy, that I should correct an error in my letter of the 1st inst. I did not intend to include *him* with those who have been so personal in their remarks as "Verax," "A Practical Miner," and N. Ennor, who, for want of something better to sustain their line of argument, have resorted to the very ungentlemanly act of throwing dirt at each other. This is quite as unbecoming as the practice prevalent amongst the labouring miners of deciding their argument by *physical combat!* Mr. Coxworthy is in error in taking it for granted that I have, in disguise or otherwise, taken any side in the present controversy. I have had nothing to say on the subject; and so far as I am able to perceive, from all that has been written in your Journal, nothing is yet really known as to the origin of lodes. As your correspondents do not happen to think alike, I would take the liberty of recommending them to "agree to differ," if they cannot convince one another. Mr. Ennor appears to think that, having given his name, he may be as personal as he pleases. This is manifestly wrong—dirt thrown by a known or unknown hand being equally objectionable. After the gentlemen have written all their letters, I should be glad to see a postscript, giving your readers, in a few lines, the gist of their respective arguments.

Truro, July 16. R. SYMONS.

REMARKS ON MINERAL VEINS.

SIR,—I thought your talented correspondent, Mr. Coxworthy, would have forborne until he had been his round with me, or, at least, until I had done with "Practical" and his colleague, whose letters have dwindled into poetry and abuse, without attempting to authenticate a single fact, further than to set me down for a madman,—with which, however, I most readily agree, as madmen often make shrewd remarks, but fools are rarely known to do so.

Turning to my friend, Mr. Coxworthy, I beg first to tell him that I would much rather he had brought his interesting remarks to bear on some able chemist, as it is generally known that I was bred a practical miner, and chemistry formed no part of my education.

I will not even attempt to meet the wisdom of "Practical," since he can produce metallic copper from copper in solution in two minutes. What a wonderfully theoretical man! and he to tell us of it. Who would attempt to compete with him? The bare thought would unnerve many a man; although I fear there are many of these kind of men in the chemical field, as they never appear to have thrown the essence of light on the beautiful laws of Nature. There is not one of them that I know of who has so minutely analyzed the rocks in the much-talked of mineralised districts, as to be able to tell us what are their component parts, and whether the strata about East Crinnis, Devon Consols, and Wheal Towan are the same. "Practical" says all clay-slate is of the same component parts, seldom containing more than three substances, and not mineralised; neither do they aid or assist the lode. Who will believe this dogmatical assertion? not one practical miner attempts to bear him out. I am sure every well-informed geologist knows that every change in the rock differs in its component parts.

I will next make a few remarks for the practical chemist, with a view of drawing something from him to benefit the mining public; it is on this branch the practical miners want instruction. The majority of them are open to conviction as to their deficiency in this useful branch of science.

Turning again to Mr. Coxworthy, I would first remark that he appears to have misunderstood my meaning as to drainage of rocks; it was referred to as a proof that all rocks are more or less mineralised. The drainage I pointed out was from a rock tapped, with no lode near it, as a test of what it contained: it proved the rock discharged copper in solution, and the lode, before it was taken away, was fed chiefly by this water. It was very rich to about 30 fms. deep, but not in native copper; it was the yellow sulphuret of copper. Were this water, as it now came in from the rock, put into a wooden pan, and iron put in it, native copper would be produced; but if iron was not placed in it no native copper would be found. This is one of Nature's laws revealed by a chemical action, under a cold process, too.

Will Mr. Coxworthy be kind enough to tell us, if any other substance was introduced, whether the yellow sulphuret of copper would be formed, and what that substance is? I have seen old iron thrown into pans and saturated with this mineralised water to obtain copper. If we set it down that 60 gallons of this water contain in solution 2 lbs. of copper, Mr. Coxworthy may also tell us if, by the addition of any quantity of iron, more than 2 lbs. of copper could be obtained, without reference to time of standing, and whether it is possible to increase matter. It is a very material point to know. Mr. Coxworthy says it is to those operations I attribute the formation of mineral veins, wherein he also misunderstood me; and I again reiterate that I never gave an opinion as to the formation of mineral veins, further than my remarks to a "Looker-on," in the Journal of the 5th July. When I do so, I hope "Practical" will act like a kind-hearted fellow, and get an easy conveyance to take me to the asylum—he ("Practical") taking care I do not outwit him by the way.

I have before stated that the uniting of substances in the earth caused a chemical action and crystallisation to take place, which leaves ores in lodes in the state we find them. If I am wrong, I should feel extremely obliged to Mr. Coxworthy for correction. I will next suppose a case of veins running east and west, the layers of rock running north and south, what I call a right angle stratum. This rock on the north side brought in water with the same substances held in solution as in the rock before-mentioned. The south side brought in iron, which met in the lode, where a chemical action took place. This lode being a conductor to the surface, would not ore be formed from the level of the influx of water to near the surface? Will Mr. Coxworthy confute us that this chemical action does not take place, and native copper will not form in the lode? Under these circumstances, then, I ask if yellow sulphuret would not also form, under the same law, with a different solution; and, if so, what are the solutions?

The Cornish idiots know what solutions will produce native copper in two minutes; and I am sure there is room for the practicals in the laboratory to discover what will produce the yellow sulphuret of copper, which will open a way for the discovery of all the solutions that form all the other contaminated ores.

My frantic ideas have led me again to repeat the opinion—that I believe all ores are formed in this way, as it is well known that nearly all rocks contain iron; and the much-talked-of gossan on the back of lodes is often half iron. If Mr. Coxworthy, or any other person, will show us any stratum, or rock, on the two sides of a lode that hold in solution a large portion of the same substance, that form any kind of copper in ore, with a free drainage to the lode, I will risk the working of such lodes. If any one will call on me, I think I should have but little difficulty to convince them, from the rocks themselves, that they are mineralised, and also that there is some gaseous current passing up through the veins in the rock, or it may be termed a magnetic or galvanic fluid. This may also assist in producing the chemical action that formed the ore, and even caused the small increase of temperature we at times discover in water coming from lodes, which in our mines are seldom above the circulating medium of blood; and in no case is there ever any heat to be discovered in the rock apart from this water. I have never yet met with hot water from a regular lead lode. Will Mr. Coxworthy tell us how this happens? "Practical" tells us that fire is not the way to try lime. Then let him do it by chemical action; and what will it amount to? Mr. Coxworthy will tell us if he cannot dissolve rock by chemical action. If so, will he say if Nature is deficient of that acting power? Can she dissolve a rock; and, if so, what becomes of it? A man needs not the eyes of "Argus" to see its solution daily brought up by the way side. I know a spring that produces hundreds of weight every season, and of a place on clay-slate where there are 50 tons deposited. "Practical" wishes to carry us over to Italy to see the new lime formations. I need not go there: I witness that act every day.

We also see quartz grow in a short space of time, and the needle-like carbonates of lead, arseniates, and needle antimony—all forming on the hard side of capel rock, that appears to the eye to contain neither lead nor antimony. I ask if these are not strong proofs that all the substances in a lode grow? Will Mr. Coxworthy tell us by what law one kind of ore should grow and accumulate together, and others should not? In that case what are the growing ores? It will be useful information to obtain; it is what we want to be set right in. All those things I have mentioned are known to grow under a cold process—that is, they never scald one's fingers when we touch them. Mr. Coxworthy may also inform us what the solutions are that form each of those things I have mentioned, as we know them to grow; but not in the short space of two minutes. N. ENNOR.

Wivelscombe, July 16.

[We are compelled to postpone the conclusion of this letter until next Journal.]

THE MINERAL VEIN QUESTION, OR HEAT AND COLD.

SIR,—No one can lament more than I do the affliction which has so long deprived your readers of Mr. Lake's instruction, but philosophy, I am sure, has long since taught him to bear with fortitude and resignation the ills and foibles of this transitory stage, to the preservation of the full vigour of his mind for the development of those laws which alone can enable human nature to appreciate the wisdom and goodness of HIM whom it has pleased to bestow on man the blessing of reason; and since he has done me the honour of referring to my principles, and has drawn therefrom deductions which his former admissions do not warrant, I must beg to recall to his mind the state of the inquiry at the period when our correspondence terminated.

It will be in his recollection that about the close of last year he claimed priority to the discovery that the atmosphere of a body is always in an opposite electrical condition to that of the body itself—a circumstance to which I refer, not for the purpose of re-agitating that portion of the question, but to establish the importance which Mr. Lake attaches to the principle; and if to his observation that "there is not a shadow of proof that cold is electricity," I attach my entire concurrence, no further misunderstanding will arise on that head: if ever I have used any expression that could by possibility be interpreted into cold being electricity, it has been in contradistinction to the received doctrine of the identity of heat and electricity; and on reference to page 7 of "Electrical Condition" (a copy of which I will send to Mr. Lake) it will be observed that, after detailing certain facts and experiments, I remark, "evidence of cold being nothing but an electrical condition may be traced in all natural phenomena," &c.—a condition, I maintain, that indicates plus, whilst heat shows the opposite or minus state; and if we can place credence in the evidence afforded by Mr. Weekes, who was unquestionably an original and shrewd philosopher, the electrical condition of the atmospere increases in intensity with the increase of cold, or distance from the earth.

Allowing, then, that "heat and cold thus appear to be electrical effects, like light and magnetism, but they are not electricity itself," it remains for Mr. Lake to show in what manner electricity produces in the earth an effect of cold, to the subversion of the admitted principle that a body is invariably in an opposite electrical state to the atmosphere by which it is surrounded. As regards the piece of *fine* wire when placed in the circuit of a *powerful* voltaic battery, and the conductor to St. Paul's, when struck by lightning, becoming red-hot, these are effects that are readily reconcileable to the above principle; the metal not being sufficient, readily to carry off the fluid, the atmosphere was thrown into a highly positive state, and the metal naturally passed into the opposite condition; and if the intensity of the electricity be sufficient, fusion and deflagration, or *chemical action*, ensue; but if, on the contrary, the intensity of the current be decreased, or the size of the metal increased, no such action takes place, and the conductor continues cold. Let us not lose sight of a principle; if we allow isolated facts to influence our judgment, confusion must necessarily ensue, and it is this system of reasoning that has reduced science to a mere jargon, of which the scientific world being now satisfied, and with it much dissatisfied, all manner of devices are resorted to, but the creditable one, to "get out of the mess."

Mr. Lake asserts that granite is not of fiery origin, *because* its crystalline construction proves it—lava from a volcano being totally different in appearance. I have always thought that glass, which resembles quartz, was produced under the influence of heat and crystallisation while cooling; but this cannot be the case, because it differs from lava in appearance, which *is* produced from fiery origin. But whence, under the cold doctrine, that fiery origin proceeds, or how generated, does not appear. We may be told it is referable to "chemical action;" but an influence sufficient to liquify millions of tons of matter, not of the most fusible character, must be produced on rather extensive surfaces; and the crust of the earth, I believe, generally speaking, is rather compact, or at all events I have not observed in the sections of our mines anywhere described a *hollow space;* and if there were such spaces, their surfaces, so far as we know, are composed of matter on which water does not violently act, although its action, combined with that of the *present* atmosphere, is sufficient to produce on the surface of the earth all those appearances in our mineral veins which have induced the crystalline doctrine, and to which I shall have occasion to refer in "Atmospheric Influences." The facts which in Mr. Lake's estimation afford the strongest possible proof of the unsoundness of the igneous theory I submit, compared with the crust of the earth, are but skin deep. Matters of different kind produce great influence on what is termed heat; and it appears to me that the only way of investigating such a question as this is to determine the relative temperatures at depths of 1, 2, 3, and a hundred fathoms.

The fact detailed in your Journal of the 19th, of masses of native copper being found near Lake Superior, varying from 1 to 200 tons in weight, and that this copper region extends over a distance of 200 miles, must prove rather a poser for the supporters of the crystalline theory. These masses, be it observed, in many cases, protrude through the surface. The veins are innumerable, running parallel to each other, and, in many instances, not many yards apart. The whole lies in a band of *trap rock*, and in the case of Prospect Bluff, instead of lying parallel with the bluffs, crop or *end out on one of the highest bluffs* in the vicinity. These *fields of copper* appear to prevail, then, alike at the North Pole, South Pole, and at Tavistock; but how were they produced by crystallisation! FRANKLIN COXWORTHY,

Canterbury-place, Lambeth-road, July 14. Author of *Electrical Condition.*

THE IGNEOUS THEORY.

SIR,—In your last Number I saw a letter from Mr. Lake, in which he contends that the temperature of mines is not in proportion to their depth. Without wishing to advocate any theory, I confess that I dissent from that gentleman's opinion, as I think it probable that in the case of *no currents*, or *equalised currents*, of air the temperature would increase in tolerably regular ratio as you descend. In this opinion I am borne out by that of a mine agent, whom I just now accidentally met. Did Mr. Lake take the currents into consideration?

Truro, July 16. R. SYMONS.

THE DISCUSSION ON THE FORMATION OF LODES.

SIR,—I very much regret to see, from your last week's Journal, that the public have lost so valuable a man as Dr. Murray, whose contributions to the world, in the shape of useful information, have been very valuable. If the like could be said of more of your numerous correspondents, it would highly gratify the subscribers to your paper; and, instead of reading a host of personalities, we should glean some useful knowledge. If, for instance, some of those who take the most prominent position in discussing the formation of lodes, were to inform us by what means or in what districts they have arrived at all their knowledge, or give us proof of their superior judgment by naming the mines they have successfully managed, projected by themselves, and what mines they have been called upon to manage, previously unproductive, but which through their superior skill were made profitable, they would then give us such information as would enable us to judge of the value of their remarks and their services. Some of them *may not* want employment, still they may be anxious that their theories should be favourably received; and surely they ought to give some reason for claiming public confidence, as well as the right to occupy so much of your valuable space from week to week. It is not sufficient for the public that a man asserts that certain mining companies have benefitted considerably by his services, unless he gives the names of the mines or the companies so benefitted, as the mere assertion of no man can be received as proof of his ability in these days. Perhaps, Mr. Ennor and Mr. Hopkins will lead the way in giving this information; and they will find that the public will know how to appreciate it. At present, no evidence of their superior judgment or management is before the world; but let it be clearly demonstrated in the columns of your paper by the names of the mines being given, and we shall all be able to form an opinion.—AN INQUIRER: *London, July* 15.

INVESTIGATION OF MINING REPORTS.

SIR,—I perfectly agree with your correspondent, Mr. H. Ashe Asshecourt "as to the necessity of having a committee of qualified independent gentlemen to investigate mining reports, rectify share-list prices," &c.; and this is what a Mining Exchange was expected to do; but until they inject fresh blood into their assembly, the operation will not have its due effect. At present the committee, with one exception, are sharebrokers and dealers, each having his own favourite object to drive at, up or down, as it may be, clashing with that of others: there can be no unanimity in such a conclave; as such I despair of their effecting any good, until proper premises are found, in a convenient spot, and a considerable increase is made in the number of subscribers, from whom could then be selected a new committee, more likely to give satisfaction out of doors than the present one, solely on account of their individual calling.

Temple, July 16. JUNIUS.

MINING DIVIDENDS AND CALLS.

SIR,—My attention has been directed to this subject in your Journal of the 5th inst., wherein it appears that 13 mines, during the month of June, made dividends altogether amounting to 12,720*l.* 10s., whereas 23 others made calls for 14,615*l.* 5s. (Millpool being 512*l.* more than your list, the shares having been increased to 1024, and the call 1*l.* each). I have, in a former communication, stated that the parties who received the larger portion of the said dividend money pocket it; a very slight portion of it goes towards paying calls on the other list. Although part of that money would, doubtless, be well laid out in forwarding the objects in nine of the mines specified, still there is an uncertainty as to eight of the others, and a still greater risk in the remaining six, so that parties interested should keep a good look out ahead, and know what progress is making at the mines they adventure in. Brilliant reports received weekly at their respective town offices of business, with selected specimens and assays of ore, are not entirely to be relied on; and as these, in a great many instances, lead to no sale of produce, or, if any, not enough to pay the secretary's salary, printing, and other incidental office expenses, the question should be with them—"Is it not better to take the good premium upon my shares, as quoted in the Share List, rather than have to wait the prolonged time it will take to bring the mine into a profitable state of working?" In numerous instances, I do not hesitate to say parties who thus realise will have no cause to repent hereafter. At all events, they can receive no harm by attending to the hint thus given by—ARGUS, of Truro: *July* 15.

ROYAL SANTIAGO MINING COMPANY.

SIR,—I think there can be but one opinion of the policy of most strenuously carrying out the recommendations made by the directors of this company at the last annual meeting. Looking at the vast returns of copper made for a series of years from our mining ground at Cuba, and the amount of dividends paid to the end of July, 1846 (232,400*l.*, say 53*l.* 4s. per share), and what desirable work we can accomplish for less than 5 per cent. upon that sum, I can conceive no other than that every proprietor will most cheerfully respond to the call in the promptest manner, so that we may the earlier arrive at a knowledge of what the next level is likely to do for us at Taylor's, and expedite the exploring at St. Andrew's Mine. The latter object is of vast promise. The Sanctuary lode still yields large quantities of ore, close upon the boundary line of our sett; and Victoria shaft is admirably situate for prosecuting it in depth within our own limits. The expense of an engine, and sinking that shaft to a proper depth, will not be above 30s. per share; and should we fortunately meet the lode on the other side of the cross-course as good as it was on this, the dividends would be quickly resumed, and place us where we stood once—at the head of all the foreign copper mines as to produce and value. The continued prosperity of the Cobre Company's workings, approximating so closely towards us as they do, ought to spur us on to be up and doing.

Lombard-street, July 17. AMOR FRATERNUS.

WHEAL HAMLYN.

SIR,—If the whole of my last letter had been published, it might have possibly spared me the trouble of this reply, and Mr. Peet would hardly have ventured to make such assertions as are contained in his evasive letter. He charges me with scurrility and malicious insinuations. I have confined myself to facts furnished by himself and the prospectus. I leave to the judgment of your readers whether to me, or the author of these terms, belongs the imputation of scurrility and malicious insinuation. Mr. Peet states that "only one actual blunder" appears in the prospectus. His own letter convicts the proprietors of *three* important misstatements at least—that there was no lease in existence—that the dues were not 1-20th—and that the shares were not 2048. I leave to Mr. Peet's ingenuity the explanation why these misrepresentations were circulated; to me and the public the reason is obvious. Surely, Mr. Peet must know how many prospectuses he circulated. I really cannot say whether 99 or 100, but they became circulated, and *privately* too, which alone is a very suspicious circumstance. Having already published my name in his first letter, Mr. Peet now complains that I shelter myself behind my initials, and asserts that I desire to damage the interest of some individual in the mine. This is an evasion of the question, and far too transparent not to be at once seen through. I have dealt with facts only, and they are incontrovertible.—R. S.: *London, July* 18.

DEVON HAYTOR GRANITE QUARRIES.

In the *Mining Journal* of the 14th June last, we noticed the fact that these quarries, long famous for the excellence of the material produced, were about again being worked by a company formed for the purpose; we also gave some statistical details of the superior qualities of this stone as compared with the best granites in the market, in strength, durability, and power to resist abrasion: and also enumerated buildings in London where this granite may be seen to advantage:—London-bridge, Goldsmith's Hall, the New Hall of Christ's Hospital, Fishmonger's Hall, and the Great Arch of Tothill-fields Prison. The quarries are situate on Haytor Down, seven miles from Newton, South Devon, 2000 feet above the level of the sea, and are so called from "Hay Tor," which is the centre of one of those groups of the so-called "erupted" or "plutonic" rocks, which form so distinguishing a geographical feature of Devonshire. The property formerly belonged to a Mr. Templer, by whom the quarries were originally opened, and other gentlemen joining him, they commenced working as the Haytor Granite Company, expended large sums in erecting machinery, the formation of a tram-way, seven miles long, from the quarries at Ventiford, on the Stover Canal, where there is a powerful crane, completing the means of transit to Teignmouth, the shipping place seven miles further. The entire outlay was about 30,000*l.*, but the company carried on a large and lucrative business for years, and the magnificent polished columns in the library of George IV., in the British Museum, afford good evidence, not only of the extreme beauty of the material, but of the vast size of the blocks procurable. After the property came into the possession of the Duke of Somerset, the late Ald. Johnson obtained a lease for seven years, and we have already shown how, instead of working them, he kept them closed to enhance the value of quarries of his own at Princetown, on Dartmoor. The present company hold a lease for 21 years, at the comparatively trifling rental of 200*l.* a year, without any other charge or royalty, and in addition to the usual market demand, it is expected the stone will be largely employed in the following works:—Westminster-bridge; Victoria Docks, Woolwich; Folkestone Harbour, Thames Embankment; Southampton, Gravesend, Hull, Sunderland, Liverpool, and Birkenhead Docks; Portsmouth and Sheerness Docks; the approaches to the new Chelsea-bridge, &c. We understand the shares have been largely applied for, and that the allotment takes place this day.

MINING IN CALIFORNIA.

From San Francisco the accounts, extending to June 1, are of a very remarkable character, apart entirely from the enormous and increasing amount of remittances reported from Panama. Large quantities of gold, extracted from the quartz near Sonora, by the very simple process of crushing the rock with a hammer, were arriving in San Francisco, and operations on an extensive scale with powerful machinery have been opened. Nevada journals contain the following striking reports of the progress of machinery in that district:—

"There are now two steam quartz-crushing mills in successful operation, and five more in process of erection, one of which is to be started to work in a day or two, the latter, by Messrs. Collins and Cropet, having six stamps, each weighing 650 lbs., and working together in a common trough, which is securely built of the most solid materials, and capable of withstanding any force that may be applied, and calculated to crush about 10 tons of quartz per day. Mr. Abbey's mill was the first one which was set to work, having now been in operation since about 20th Feb., and does a fair amount of business. About 1¼ mile from Grass Valley, and near Ophir Hill, a mill is being put up by Messrs. Richardson and Sowers, with a prospect of doing a very good business when once in operation. The heaviest machine in the valley is now in process of erection for Judge Walsh, and is expected to be in operation by the 1st June. The mill is to commence work with a battery of eighteen 550 lbs. stamps, calculated to pulverise 40 tons of quartz per day. As the business of the mill increases, the batteries are to be increased to 40 stamps. On the 1st June it is expected that the mill of Messrs. Peck and Co. will also be in operation, driven by an engine of 30-horse power, and running 20 stamps of 550 lbs. each. These will also be worked on the improved trough or box principle. The Sacramento City Company, Colonel J. Hays and Co., will have their machinery in operation within a few days, driving the stamps in two equal batteries."

The *Stockton Journal* learns that the quartz veins at Carson's Creek are yielding immense returns. It says,—"In one place the workers took out 90 lbs. of pure gold in one day. In three days the same party took out 150 lbs. of unalloyed gold. To those who are sceptical as to the value of the quartz veins with which the whole section of the San Joaquin district is diversified, this account may appear somewhat exaggerated; but, from the authority on which we give this extraordinary news, we can fully assure all doubters that there is not more truth in the most ordinary and well-attested every-day occurrences than there is in our statement."

A San Francisco journal says,—"We were shown, at the office of Moffat and Co., some 50 lbs. of gold specimens, brought from a gold mine in Calaveras. They had been hammered by hand out of the quartz rock, and, from their appearance, the rock must be the richest we have yet seen. Indeed, the wealth of this mine appears inexhaustible. The stockholders of the Deseret Mining Company have just held their annual meeting at Los Angeles. This company are now in active operation at their mine, about 250 miles from Los Angeles, and have two mills at work. Two shafts have been sunk, one 40 and the other 16 feet deep, and about 150 tons of rock have been thrown out: 15 men are employed, and preparations are being made to erect more mills. The company are very sanguine of success, and have exhibited some beautiful specimens. They have, as yet, had no difficulty with the Indians at their mine, although some of their prospecting parties have been charged upon by the Utahs, who, discovering them to be Americans, treated them with the utmost kindness."

Letters from Downsieville, dated 19th May, in the San Francisco papers, add,—"Dry diggings are numerous, and are being discovered in every direction, and almost every new 'strike' is richer than the last. Durgan's Flat, opposite the town, has turned out over $200,000 within the last two months. One claim, belonging to some gentleman from Pittsburgh, has yielded over $13,000, and was sold a few days since for $6000, cash, and has almost repaid the purchasers already. I have seen $2100 for one day's work for two men—all large, coarse gold. Large deposits of quartz have been found between this place and Indian Creek, which 'prospects' very large from the specimens brought in. A quantity has been sent to Nevada to be experimented upon, and but little doubt exists that it will pay at least 50 per cent. Miners are arriving in large numbers every day, and many are leaving here with their 'piles' for home. Living is cheap—fresh beef, pork, flour, butter, &c., plentiful and cheap, and but few who board themselves spend more than $1 per day."

From other sources we extract the following additional items:—"Rumours have been rife of late that the veritable 'Laguna d'Oro' has been found. Whatever may be the case, near Rich-bar, on the North Fork of the Feather River, another bar has been struck, where 700 claims were taken up in one day, and those who had gone to work were getting from 10 to 50 ozs. per day. This intelligence, from such good authority, can hardly be doubted. The neighbourhood is known to be one of the richest—43 men out of 400 having gone home this year with fortunes, after a single season at Rich-bar."

"There is a prospect than an unusual quantity of gold will go forward from this city by the steamer of the 15th. Freeman and Co. have already received more than $60,000, and their entire shipment will probably exceed $100,000. The price of dust at present is not considered an inducement to sell, and the miners rather prefer to send it on themselves to getting less than $16 per oz., even if it is almost one-quarter black sand. The accounts of further rich discoveries near Weaverville, incline us to the opinion that the Cayota diggings are likely to prove as extensive in this region as at Nevada."

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending July 11, was 37,318.—Amount of money, £155 9s. 10d.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—Field's engine-shaft is sunk 8 fms. 4 ft. under the 90 fm. level, on a lode about 6 ft. wide, and at this depth it contains more spar than for the whole sinking, which we consider a favourable indication. There has been a winze sunk under the 90 fm. level, east of this shaft, 1 fm. 2 ft.; lode here 4 ft. wide, ore course on the north part 2½ to 3 ft. wide, worth from 40l. to 50l. per fm.; this winze cannot be sunk deeper until the water is drained by the engine-shaft on the driving of the 90 fm. level east. The lode in the 60 fm. level, east of this shaft, is from 6 to 7 ft. wide, worth for copper ore from 80l. to 60l. per fm.; this level is 6 fms. to the west of No. 3 winze, that is sinking under the 70 fm. level; the lode in this winze is worth for copper ore from 100l. to 110l. per fm., and is sunk 5 fms. 4 ft. under the 70, through this circumstance we are expecting a great change in the 80 fm. level for the better shortly. The lode in the 70 fm. level is still holding to the south of Wyld's shaft, and is extended to within 4 or 5 fms. of the eastern cross-course, worth at this time from 40l. to 50l. per fm. for copper ore. Wyld's shaft is sunk 3 fms. 3 ft. under the 70 fm. level on a north part of the lode, and at this time is producing some good stones of copper ore. We are sinking a winze under the adit level, east of the engine-shaft, on a north branch, the lode so far is poor. We are also cross-cutting in the adit level north-east of Wyld's shaft. No other tutwork operations at present. Our tribute department continues to look well.

APPLEDORE.—The engine-shaft is sunk 12 fms.—the whim in full operation. The engine-house and buildings are progressing. Ground in shaft very favourable; but the water is quick, which in some measure delays the sinking, I am, therefore, anxious to get the engine to work.

BEDFORD UNITED.—In the 115 fm. level, east of the engine-shaft, we are not through the cross-course, which is very hard and wet. The lode in the 115 fm. level, east of Andrew's winze, is 4 ft. wide, and yielding from 2 to 3 tons of ore per fm.; in this level west the lode is 3 ft., and producing more ore than for several fathoms past. The lode in the 103 fm. level east is 4 ft. wide, and worth about 5 tons of ore per fathom. There has been no lode taken down in Rundle's winze in the 90 fathom level. Mollard's winze in the 80 fm. level is not holed to the rise in the 90 fm. level. In the 47 fm. level, east and west, there is no alteration.

BORINGDON PARK.—The end is much the same as when last reported on. The men are now engaged driving north, as I think the main part of the lode is in that direction. Hitchins's shaft is down about 3 fms. below the adit level. I am afraid we shall not be able to sink much further, as the water is so very quick. In consequence of the water being so very scarce, we shall not be able to get round so much lead as I anticipated until the engine is at work. I calculate about having 6 or 7 tons of good quality ore about the middle part of next week. We cannot do anything with our hutch-work for want of more water for washing it; I, therefore, think it advisable to suspend dressing until our engine goes to work. Our engine-house will be in readiness for the engine by the time it is here. I have had advices of parts of it being on its passage; it is expected at Plymouth every day. The carpenters' shop will be completed in another week,

BRYN-ARIAN.—In the 20 fm. level, driving west on the north part of the lode, it is 6 ft. wide, composed of killas, spar, and at times good stones of ore, but not of any value at present. The same level driving west from the winze is in a lode 5 ft. wide, yielding 15 cwts. of ore per fm. The stope in the back of this level, west of the engine-shaft, is yielding 15 cwts. of ore per fm. The stopes in the back of the 10 fm. level west are producing 8 cwts. of ore per fm. The 20 fm. level, driving south from Hallett's, is much the same as last reported, the lode large and orey. The same level driving north is in a lode 6 ft. wide, composed of killas, spar, and jack, with a tolerably good mixture of ore—much improved in appearance since last reported on.

CALLINGTON.—The lode in the diagonal shaft, sinking below the 125 fm. level, is 15 in. wide, composed of quartz, white iron, prian, and stones of lead—a very promising lode indeed, and we shall lose no time in cutting plat, &c., when we have got down the lift by way of preparations, we shall extend the levels north and south at the same time that we are sinking the shaft below the 135. The lode in the 125, north of the north engine-shaft, is 20 in. wide, producing 3 cwts. of lead per fm. The rise over this level is communicated to the 112, since which time we have set a tribute pitch in the north end of the same to four men, at 6s. 8d. in 1l. on the value of the lead, and have another pitch in reserve in the south end, to set at our next setting, when we shall be in a much better position for clearing the stuff, &c. The lode in the 125 south is 14 in. wide, composed of white iron, spar, and stones of lead. This end is now just under the winze sunk some fathoms below the 112, and which we have resumed since the water has been drained, and we purpose rising against the same to expedite the holing, and to effect a communication in the most economical way, after which we shall be in a position to set new tribute ground in this direction. The lode in the 125, south of south engine-shaft, is 15 in. wide, composed of spar, prian, and stones of lead; we have about 6 fms. further to extend this level to reach the shoot of lead passed over in the level above. The lode in the 112, south of south mine, is 12 in. wide, producing 4 cwts. of lead per fm. The ground in Kelly Bray shaft, sinking below the 50, is hard, but we think it will be found more favourable shortly, from the fact that there are several small branches of a lode approaching each other, and no doubt they will form a junction, and we hope a good lode will be the result. The lode in Kelly Bray rise, over the 70, is 3 ft. wide, the eastern end of which is producing 3 tons of copper ore per fm.; but the western end is at present hard and poor. The lode in the stopes in the western end of the rise is 3 ft. wide, producing 4 tons of ore per fm. We shall sample a parcel of lead ores on the 21st instant, computed 45 tons, to be tendered for as usual.

CARBONA.—The engine shaft is sunk 40 fathoms from the surface, and is going down by six men, at 9l. per fathom, on a lode 4 ft. wide, underlaying north, yielding saving work throughout, and increasing in value with increased depth. The 35 fm. level is in 15 fms. west of the engine-shaft, opening on a lode 3 ft. wide, by three men and three boys at 30s. per fm., worth 7l. per fm. A rise is going up behind this end by four men and three boys, at 40s. per fm., on a lode worth 7l. per fathom; the 35 fathom level is driving east by three men and three boys at 60s. per fm., and is in from the engine-shaft 12 fms.; the lode is 4 ft. wide, and is of a very promising character. The 25 fm. level east is in from the engine-shaft, 52 fms., and is driving by three men and three boys at 60s. per fm.; the lode is 2½ ft. wide, giving backs which will make good returns at a tribute of 6s. 8d. in 1l. The 15 fm. level east is extended from the engine-shaft 60 fms., and is now going forward by two men and two boys at 80l. per fm. The lode in the present end is split, but contains a good branch of tin on the north side, worth 50s. per fm.; the back of the 15 fm. level, east of the engine-shaft, is working by three pares of men at one-half tribute; and, on this district being laid dry and ventilated, there will be great lengths of ground that will work at a moderate tribute, leaving fair profits. An eastern shaft is going down on this lode from the 15 to the 25 fathom level, which will drain and ventilate the eastern ground. It may possibly require two months to make the communication; but, when completed, the returns of tin will at once increase. The adit, 200 fms. west of the engine-shaft, has nearly intersected the north lode, and on which it will be driven east, giving at the engine-shaft a depth of 20 fms. The adit on the south lode is being cleared, which will lay open much productive ground. In the deads left by the former adventurers valuable stones of tin have been found—a proof of the high quality of the lode they worked. It will take three months to complete the clearing of this adit. A caunter lode from the south-west falls in with this south lode, besides several small rich feeders dropping into it laterally—all justifying the general opinion that in depth this lode will be eminently valuable for tin. Had it not been for the delay in opening on the lodes caused by the floods in Nov. last the mines would by this time have been making a profit. From the ground already opened on the north lode several parcels of tin of very good quality have been sold; and, supposing the eastern shaft completed to the bottom level, it would not be calculating too high to say that the tin ground discovered will yield sufficient produce to re-pay all the outlay. Owing to the floods, a further time and outlay is required before the lode can be properly laid open; and it is likewise contemplated to drain the south lode from the engine-shaft to 40 fms. in depth, and to examine several others which yield rich tin on the back, and of a very promising character. Considering the prospects of the lodes, so far as can be judged from the ground laid open, it appears very evident that, to place the mines in a permanently productive and profitable position, these lodes have only to be worked in length and depth; but to effect which another steam-engine will be required, with a small capital for such extra plant and labour

CEFN BRUNO.—The lode in the 24 fm. level is 3 feet wide, producing 1½ ton of lead ore per fm. The lode in the adit level is 6 feet wide, producing good stones of ore. The lode in the shaft sinking from surface, 200 fms. west of whim-shaft is 20 in. wide, still yielding good stones of ore; the lode is not yet intersected in the deep adit level.

COPPER BOTTOM.—The engine-shaft is now 7 fms. below the 50 fathom level; the ground in the shaft looks much the same as when last reported. In the 40 fm. level, driving west of Paull's shaft, the lode has improved since my last report; it is now 18 in. wide, producing some good stones of ore. In the winze in the bottom of the 20 fm. level, west of Paull's shaft (now suspended in consequence of water), we have a good orey lode; in order to drain this winze, we have commenced driving the 30 fathom level west of Paull's shaft; we have in this end a very kindly lode 2½ ft. wide, composed of a beautiful spar, prian, and good stones of yellow ore; we have about 10 fms. to drive to get under the ore ground. We are rising in the back of the 20 fm. level over the winze just mentioned, and are breaking some good saving work in this rise. We have cleared some rubbish in the back of the 20 fm. level, west of the engine-shaft, and have discovered some ore ground; we have done the same east of Paull's shaft in the back of the above level, where we have a lode 4 ft. wide, producing some fine black and yellow ore. The 20 fm. level, driving west of Stanley's shaft, is at present unproductive for copper, but is exceedingly promising; our chances here are further west. In the 10 fm. level, driving west of Stanley's shaft, the lode is 2 ft. wide, producing occasional stones of ore. On the north lode, in the 30 fm. level, driving west of May's shaft, the lode is 3 ft. wide, composed of spar, prian, mundic, and stones of yellow ore—a more promising lode I have never seen in this or any other mine, but we are not deep enough in this part, neither is the end far enough west for the run of ore ground. I strongly recommend the sinking of May's shaft below the 30 fm. level. The south branch in the adit level still continues to produce some rich ore. I have no alteration to report in any other part of the mine. I regret, owing to prior engagements made by the sample takers of the different copper ore purchasers, our sampling is postponed to the 22d of this month. I respectfully beg to lay before you a plan, which if adopted will, I believe, repay the shareholders the money they have expended, and bring the mine into a dividend-paying state. What I have to propose is that the present line of flat-rods be altered, and the pitwork be put in May's shaft; this shaft can then be sunk under the 30 fm. level. At a greater depth, in this part of the mine, I consider that valuable discoveries will be made; the cost of the proposed alterations will be about 150l. The above plan, or that of putting a smaller engine on Highburrow shaft, ought to be immediately adopted. A 40-in. cylinder engine would be of sufficient power.

CYFANNEDD FAWR (LEAD).—In March we commenced the clearing out and timbering. Since then we have driven 9 fms. on the course of a lode 19 fms. to the west of No. 1 workings, until we came to a junction of two lodes. In No. 1 course we stoped 2 fms., 33 ft. from above the present workings, but as the ground did not prove so good as we expected, we stopped there. We have also stoped 6 fms. under the present level. The lode continues promising, and in last month we sunk 2 fms. (our present depth from level being 4½ fms.) The lode is from 5 to 6 ft. in width, full of quartz, and the lead showing itself very kindly. In No. 2 workings, we have stoped 7 fms. 3 ft. of good orey ground, the ore improving in depth, and the lode widening. The length of this stope is 38 ft., which I consider good paying work. It would be very desirable to continue the driving the present adit 14 or 15 fms., to cut the Cyfannedd Fach lode.

DOLFRWYNOG (COPPER).—In March we cleared the levels, and in April commenced driving the Fron level, which had been driven 14 fathoms. We have driven 20½ fms. along a lode, which I expect will prove the Gammddr Goch, and I look for a junction in 2 fms. driving, which I trust will prove very satisfactory. We have driven 12 fms. from the breast of Fowndg level, and intersected an east and west lode—have crossed to the south 2 fms., but have not yet reached the foot wall. From this work you have specimens, from Nos. 1 to 7, being from the hanging side, and so on to the south, as far as we have crossed. I have every reason to believe that, from the bearing and dip of this east and west lode, that the whole mass of peat in this and the western sett that has been burned for copper was fed and supported from it. I propose continuing the work until we reach the foot wall, then commence a whim-shaft from the surface, as at present we cannot expect to get ore of any strength or substance. A large sum of money has been spent in the western sett, but they have not cut this lode, as all their drivings were commenced above the bearing of it.

EAST BALLESWIDDEN.—The engine-shaft is 8 fms. 5 ft. under the adit level, lode 7 in. wide, good stones of tin—looking better than last week. The flat lode engine-shaft is now down to the back of the adit level. We expect by Saturday, the 19th inst., we shall be sinking this shaft under the adit, on the lode, in tin ground. We have also the new whim-shaft on the flat lode; we intend to sink this shaft under the adit level next month, from where we expect to raise a good quantity of tinstuff.

EAST BIRCH TOR.—The lode in the adit end is rather disordered, on account of a change of ground which has taken place since I last reported. The lode in the stopes is producing some excellent work for tin; the tributers are working with good spirit, and I find that their pitches are progressing favourably.

EAST BORINGDON.—Anne's shaft is down about 14 fms; it is going down in a beautiful channel of ground, with branches composed of jack, mundic, and lead, underlaying towards the lode. Now our whim is at work I hope to get down 20 fms., and cut into the lode in the course of another month.

EAST CROWNDALE.—In the 58 east the lode is improving, leader part 10 in. wide, composed of mundic and copper: west lode not taken down. In the 47 east the lode is small and poor. Nothing done on the south lode for want of men. I intend putting the 47 men down to the 58 and drive west.

EAST SHARP TOR.—There has been a slight delay in sinking since my last, owing to one of the pumps in the sinking lift having burst. The ground is much harder than when last reported on; consequently, our progress is impeded thereby.

EAST WHEAL GEORGE.—The lode in the 23 east is 3 ft. wide, with occassional stones of ore; the same level west is 3 ft. wide, the north part of which is yielding some good ore. The stopes in the back east are poor. The 12 east is without alteration. I am sorry to have to inform you that we are prevented from working in the bottom levels since yesterday (July 11) for want of top water. We sampled June ores, 17 tons 13 cwts. 1 qr., a sample of which I sent to Swansea.

EAST WHEAL LEISURE.—Taylor's shaft is holed to the 17 fm. level, and a cross-cut commenced to intersect Taylor's lode. In the 10 east, the north lode is 18 in. wide, composed of soft prian, ore, and white lead; in the 10 west there is a good-looking lode, of 3 to 4 ft. wide, producing 1½ to 2 tons of ore per fathom, and likely to improve. Jewell's engine-shaft is sinking rapidly through white killas. In the 27, east of this shaft, the lode is large, and producing about 1 ton of ore per fm.; the 27 west is on a lode composed of spar, jack, and good stones of ore. In the 17 west the lode is very large; driving on the north part, about 3 ft. wide, producing ¾ of a ton of ore per fm., and looking very promising. The prospects of the mine were never more cheering than at present.

EAST WHEAL RUSSELL.—Since my last report, the sinking of Hitchins's shaft has been suspended, and will not be resumed until we get our new engine to work, for which we are preparing the shaftwork, &c. We have driven in the cistern level 3 fms. south across the lode, and have not seen the south wall. We have also driven east 4 fms.; and find the lode to be looking very fine, and of the same character as before spoken of. The adit level east, towards Murchison's shaft, has been cleared 48 fms.; and Murchison's shaft is now 14 fms. 1 ft. below surface, and the lode without alteration. The masons are getting on well with the engine-house, it boiling up within 10 ft.

ESGAIR LLEE.—We have suspended the deep adit east on the caunter lode; I put the men to drive south, as the underlay of the lode in the level does not exceed 1 ft. in the fm., while in the winze 5 fms. above it is upwards of 3 ft., and without a great change in its underlay, the lode in the winze will come down to the south of the deep adit. The lode in the winze is much improved since my last, being good work for 2 ft. wide, and is at present fully equal to 1 ton of ore per fm. The eastern stope in the back of the deep adit is also improved; the other stopes are without alteration. I am glad to say that Mr. John Ellis has been as good as his promise, and we have now the whole of the castings on the mine, and we expect to be ready to put the flat-rods to work very soon.

GREAT BRYN CONSOLS.—No. 2 adit shaft is down, and we are making the plat. We have commenced driving on No. 2 lode, and I was quite surprised and pleased on Thursday to see some stones of beautiful copper ore broken from it: the lode at present is small. I am inclined to think that this, and No. 3 lode, will make together in depth, when I have no doubt it will be a first-rate copper lode. As soon as the plat is complete we shall drive on to cut the south lodes, when I hope to make some greater discoveries than ever you anticipated—I am led to think so from their promising appearances on the surface.

GREAT POLGOOTH.—In the 110 cross-cut, south of Taylor's, the ground still continues hard, but kindly for tin. In the 96 fm. level, driving east of Williams's on the north lode, the lode is large, and producing some tin; in the 96 fm. level, driving east of Clarke's south of the elvan, is as last reported—rich for tin, but no lode since taken down. In the 84 fm. level, driving west of Clarke's on the north lode, there is a good lode as last reported; the 84 fm. level, driving west of Clarke's shaft on St. Martin's lode, is worth 7 cwts. of tin per 100 sacks; in the winze sinking under the 84 fm. level, east of Clarke's, the lode is large and kindly, and worth 4½ cwts. per 100 sacks; in the 84 fathom level driving east of Clarke's, on the middle lode, the lode is large, with tin, and still continues to improve. In the 40 fm. level driving south of Boskellen, on Boskellen lode, there are some good stones of copper ore; but there is not sufficient done to say much about it as yet. In the 20 fm. level driving west of Bawden's, south of the slide, the lode is 2 ft. wide, with good stones of tin, and is in favourable ground. In the 36 fathom level driving south of Coade's, the men still continue to cut branches; and, from every indication, we think the lode must be near. In a pitch in the bottom of the 84 fm. level east of Clarke's, on the north lode, there is a large lode, worth 5 cwts. of tin per 100 sacks; in a pitch in the back of the 84 fm. level, east of Clarke's shaft, the lode is worth about 10 cwts. of tin per 100 sacks; in a pitch in the bottom of the 84 fm. level east of Clarke's, on the middle lode, there is a good lode, worth from 8 to 10 cwts. of tin per 100 sacks. All the other pitches are producing the usual quantity of tin. We have had a breakage in one of our steam-whims, which has hindered us in drawing stuff to the surface from some of our best pitches; this will only cause a delay of about a fortnight in a part of the returns. The breakage is repaired, and everything is going on as usual.

GREAT WHEAL BADDERN.—In the 51, east of Tweedale's, the end is much as last reported, ground rather harder for driving; the stopes are still productive, and good ground for opening. The 40, east of Buckley's, has improved; the stopes are producing fairly. The 30 end is hard, and lode at present poor; the stopes in the back are yielding well. The 20, east of Burgan's, still continues highly productive, and warrants great expectations; the stopes are turning out well east and west of the shaft. The cross-cut going south to cut the lode has not progressed, two of the miners having fallen sick. In the adit end the lode is unproductive. The tribute pitches are producing fairly. The surface operations are going on steadily and well. We expect to augment our samplings in future.

HEIGNSTON DOWN CONSOLS.—So far as the lode is cut into in the 55 fm. level some good stones of ore are being broken, but owing to excess of water and imperfect ventilation our progress has been considerably retarded, which we hope to remedy by the end of the present week. The 45 fm. level, for the last 6 ft. driving, has been poor, but at present it promises to improve. Victor's winze is sinking below the 45 fm. level satisfactorily, but no lode has been taken down. Eastman's winze, sinking below the 35 fm. level, produces some good saving work for copper ore. The stopes in the back of the 35 fm. level, on an average, will produce from 2 to 3 tons of ore per fm. There is no important alteration to notice on the south lode.

HENNOCK.—The water is still in at the 30 fm. level, although now the engine is gaining a little on it, but I fear we shall not be able to do much at the 30 before a change of weather. The shaftmen only are working underground, and they are still driving the 20 fm. level north, but have not taken down any lode since my last report.

HERODSFOOT.—The shaftmen have contracted to cut tip plat and sink 6 ft. in engine-shaft for 18l., from the 137 fm. level. The lode south in this level is 2 ft. wide, producing stones of lead; the lode north, in the same level, is 3 ft. wide, composed chiefly of capels and spar, with a little mundic, at present poor. The lode in the north and south ends in the 127 fm. level is yielding 5 cwts. of lead per fm. The lode in the 117 end south is yielding 10 cwts. of lead per fm., and promising a speedy improvement. The lode in the 106 end south is small and unproductive. The lode in the 94 south is 15 in. wide, producing stones of lead. The lode in the 80 end south is much improved, yielding about 7 cwts. of lead per fm.; for the last few fms. the lode in this end has been rather unsettled, owing to the ground being of rather an unfavourable character for lead, but I am glad to say that the ground seems more settled, and the lode is again assuming a much kindlier appearance. The lode in the 70 end south is about 1 ft. wide, producing a little lead. The stropes throughout the mine are not looking quite so well as they have been; still, it being a bunchy lode, we hope ere long to see a change for the better. The ground in Boase's shaft, down about 45 fms. from surface, is favourable for sinking, and in a very congenial state for lead.

HOLMBUSH.—The ground in Hitchins's engine-shaft, sinking below the 132 fm. level, is still favourable; the lode in the 132 fm. level south is 3 ft. wide, producing stones of lead, and laying open ground that will set at a moderate tribute; the stopes in the back of this level will produce 2 tons of copper per fm.; the stopes in the bottom of the level, east of the point of horse, will produce 2 tons of ore per fm.; the lode in the 132 fathom level, west of the diagonal shaft, on the north part, will produce 1½ tons of ore per fm. The lode in the rise over this level is 15 in. wide, composed of congenial spar, mundic, blende, and stones of copper ore, of good quality. The flap-jack lode in the 120 fm. level, east of the great cross-course, is 3 ft. wide, producing good stones of copper ore, which, if assayed, would make 10 per cent. The lode in the 110 fm. level east is 20 in. wide, and will produce 2 tons of ore per fm. The lode in the 100 fm. level east is 2½ ft. wide, composed of spar, mundic, blende, and copper ore, producing 1 ton of the latter per fm., and promising a speedy improvement; the lode in the 100 fm. level, west of Wall's, is 4 ft. wide, producing about 1 ton of copper ore per fathom. The ground in Wall's engine-shaft, sinking below the 100 fm. level, is more favourable, and if it should last as it is at the present time, 8 ft. will be sunk this month. We have sampled this day (July 15) a parcel of lead ores, computed 30 tons, to be tendered for as per circular, delivered as usual.

KENMARE MINES.—On the 2d instant we held the monthly setting for for July, when the following contracts were taken:—The south lode in Manby's shaft set to six men, 2 fathoms at 6l. per fm.—a large lode, composed of iron pyrites, sulphate of barytes, and particles of galena and copper ore. The forge lode in Campbell's shaft set to six men, 2 fms. at 5l. per fm. In this part of the mine we have, within the present week, reached the bottom of an "old working," not seen before for many generations; it is about 70 fms. east from the whim-shaft, on the same lode worked by the late company; we have not yet cleared the rubbish from the eastern part of the excavation, but the bottom, for about 5 fms. in length, which is 7 fathoms deep from surface, we have examined, and set Campbell's shaft to sink under it at the above price. The lode has been worked open from surface fully 30 fms. in length, and all taken away; it varies in breadth from 3 to 8 ft., and has two regular smooth walls underlaying south about 2 ft. in a fm. At Campbell's shaft, where we are now ready to sink, the lode is about 3 feet wide, and contains a vein of very rich ore. The end west from Campbell's shaft, set to two men, 9 ft., at the rate of 5l. per fm.—lode between 3 and 4 ft. wide. We are now beginning to drive where the old workers left off, and although the lode in the end only contains small veins of rich ore, I see no reason, by driving and sinking on the course of the lode, why it may not shortly become as productive as heretofore, for we cannot suppose that the former workers made such extensive excavations for nothing. And, moreover, Campbell's shaft, and the end west from it, without material improvement, will now about pay the cost of sinking and driving.—The Engine Lode: The 36 fm. level, west from Croker's shaft, is set to four men, 2 fms. at 3l. 10s. per fm., lode about 3 feet wide, and containing good stones of ore. The 27 fm. level, west from Croker's shaft, is set to two men, 2 fms. at 3l. per fm., lode producing very little ore at present. The rise in the back of the 27 fm. level is set to two men for the month, at 3l. per fm., lode 3 ft. wide, and containing good stones of ore, gossan, &c.; a larger force cannot be employed in this part until a communication has been effected between it and the 17 fm. level, which will not only ventilate both levels, but open orey ground for stopes. Lamb's winze, under the 17 fm. level, is set to four men, 2 fms. at 2l. 10s. per fm., and 10s. for cutting a plat; this winze will meet the rise from the 27 fm. level. The stopes in the back of the 36 fm. level are set to two men for the month, at 2l. per fm., lode about 3 ft. wide, and containing good ore. We have two men clearing the 17, east of engine-shaft, and hope soon to reach the end. We have set eight bargains or contracts, and they are all that can be advantageously worked at present, and from which, as the ground is being explored, I think we have every prospect of obtaining fair returns. We have also contracted to have all the stuff drawn with horse-whims from every level, at 4s. per hundred kibbles. In conclusion, we beg to observe that no efforts on our part shall be spared in order, as soon as possible, to make the mine a profitable one.

KESWICK MINES.—In the 20 fm. level north, at Brandley, there is a decided improvement both in the ore and in the appearance of the vein; producing about 8 to 10 cwts. to the fm.; in the same level south the ore is at present variable, worth about 6 cwts. to the fm. In No. 2 stope, in the 20, the ore is worth from 12 to 15 cwts. of ore per fm. The salt sump is looking very promising, and in places is worth 2 tons of ore per fm. In the engine-shaft the ground is easy. At the Thornthwaite Mine, the tribute pitches are not so good. The 27 fm. level stope is worth 8 cwts. of ore per fm. The engine-shaft is sinking by six men, at 9l. per fm.; ground wet and troublesome.

KIRKCUDBRIGHTSHIRE.—The lode in the 74 end, west of Stewart's, is 2½ ft. wide, with stones of ore; in the 74, east of Gilpin's, the lode is 3 ft. wide, with a small branch of ore on the north side; in the 74, west of Gilpin's, the lode is 5 ft. wide, with good stones of lead. In the rise over the 62 end west the lode is opening with a good branch of ore. The men in the winze, coming down on this rise from the level above have the same kind of lode, and expect to hole to the rise in a day or two. The lode in the 40 end west is still large, but without improvement in quality.

LEWIS.—In the 90 or 80 fm. levels there is no alteration since last report. Praed's lode in the 50, 40, or 30, west from copper ore shaft, and the 20 fm. level, west from Stainsby's, will average 1 ft. wide, composed of quartz, tin, and capel, all opening tribute ground. Praed's lode in the 20, east from the new shaft, is 18 inches wide, with kindly appearances, opening low-price tribute ground; in the cross-cut, south from Praed's lode, in the 20 fm. level, we have intersected a branch or lode, 6 in. wide, spar and brent, with a few spots of copper and tin ore; we are continuing this cross-cut south with expectation of meeting with other lodes. In consequence of the calciner having undergone repairs in the early part of the present month, we shall be a few days later with the sampling, when we shall have about 30 tons of tin.

LLWYNMALEES.—We have taken down the lode in the 8 fm. level that remained standing, and found it, for 3 ft. in length, to be very superior to anything I have yet seen in this mine; but at this point the lode has parted—one portion taking more northerly, and the other more to the south; this level at present is not looking so well. The 24 fm. level west is improving; it will shortly be in a good lode. The two stopes over the 14 fm. level are much the same.

LYDFORD CONSOLS.—At Wheal Mary, we have communicated the gossan shaft with the adit level, where we have now plenty of good air, and shall commence driving south on the lead lode to-day. Throughout the adit level drivage the lode is large, and presents a favourable appearance, being composed of quartz, prian, and mundic, and in places good stones of lead; a very kindly lode. At Wheal Adventure, the lode in the adit level, south of the engine-shaft, is small but kindly, composed principally of gossan, with spots of mundic—a kindly lode. Our surface operations are progressing tolerably satisfactory; the pit for a 40-feet diameter water-wheel is being sunk by a force of 12 men with all speed, which I hope will be completed, ready to receive the axle, in three weeks from this time. The masons are getting on with collaring up the engine-shaft tolerably well, and the cutting of the leats is in a forward state. We are using every exertion to be ready by the time appointed.

MERLLYN.—The lode in whim-shaft, sinking below the 26 fathom level, is worth 20l. per fm. The lode in the winze, east of whim-shaft, sinking below the same level, is worth 18l. per fm. The lode in the 26 fm. level, west of whim-shaft, is suddenly enlarged to 2 ft. wide, producing fine stones of lead, worth 12l. per fm. The 16 fm. level, west of whim-shaft, is worth 15l. per fm. We have intersected the lode in the cross-cut from engine-shaft, and also communicated the winze with same, since which we have commenced driving the 16 fm. level west from engine-shaft, lode worth 20l. per fm. We have also resumed the 15 yard level, which is worth 15l. per fm. The ground in the engine-shaft continues to improve.

NANTEOS.—The lode in Taylor's shaft is 4 feet wide, with a little lead throughout. The 40 east is still unproductive. The 30 west is yielding ¾ a ton of lead per fm.; ditto, on south lode, 8 cwts. per fm.; the 30 east, 15 cwts. per fm. The 20, east of Taylor's, on the north lode, is rather improved, being spotted throughout with lead ore. The new stope in Gwaithgoch is much improved, and now yields 8 cwts. lead ore per fm. The other stopes yield on an average 7 cwts. per fm. We sampled 45 tons of lead ore on the 8th inst. The next sampling will be rather more in quantity, there being a good supply of water for dressing.

NORTH BULLER.—No change of importance has occurred since our last report. Louisa engine-shaft has been sunk 5 ft. since last setting day, the ground is hard; a soft fluor was met with, but it did not continue more than a few inches. The lode in King's shaft is much the same in character as it was last week—they have sunk 9 ft. since our last setting. The lode in the adit end is 3 ft. wide, composed of peach, prian, and good stones of copper ore, and appears to improve as it goes down; we are strongly of opinion that this lode will turn out great deposits of copper ore in depth near the cross-course. We shall send you a sample that we broke out of the end this morning, July 12.

NORTH VENTON.—I have had a further look at the lode in the adit level and the end; the oftener I see it, the more I admire its qualities. I assure you that the prospects you have in this concern are more cheering than ordinary. Although we have driven through many fathoms of a very fine, large, and promising lode, it still continues to improve as we get further under the rising ground; the lode in the present end is 2½ ft. wide, composed of rich gossan, spar, a little ean, and a large quantity of flookan. The stratum about it is a soft blue killas; the price for driving is 1l. per fm.—the contractor to pay for all cost. I never saw a better channel of ground for producing silver-lead. Let me once more call your attention to the necessity of commencing the engine-shaft while the fine weather lasts. You have every encouragement to do so from what the neighbouring mines are doing. The Venton is turning out exceedingly well, and the Butterdon is following up close to it; the lode in either of these mines never looked more promising, if so well, at the depth, as it does now in North Venton.

OLD WHEAL BASSET.—The 10 fm. level west, on South Wheal Basset lode, is 2½ feet wide, thickly impregnated with spots of ore, but not sufficient to value. The adit west, on Paul's lode, is 5 in. wide, orey throughout, of low quality. The lode in the 12 east, on red lode, is 18 in. wide, turning out some good stones of ore, and looking kindly. The caunter has been cut in driving west at the bottom of the new shaft; it is small and very rich for copper ore—driving south at this point at 1l. 2s. 6d. per fm. A lode, supposed to be the red lode, has been cut in sinking the western new shaft; it is 8 in. wide, composed of gossan, mundic, and rich stones of ore.

PENNANT AND CRAIGWEN.—The lode in No. 1 adit is improving, it is now 18 in. big in the bottom of the adit and 9 inches in the back. We have had a good strong lode in the bottom of the adit for some time. I have no doubt but we are now driving along the top of a good bunch of ore. We have now strings of spar in the forebreast of Bush's adit, with pretty prills of lead in it.

PENZANCE CONSOLS.—In our stopes under the 24 fathom level, west of Carthew's shaft, we have a good lode of tin, 4 ft. wide, and still branches holding away in the side. In the last few days the miners working in these stopes have broken several large and very rich stones of tin; nothing is wanting here but to put up a larger steam-engine and sink the sump, and if this course of tin holds down the mine is sure to raise large quantities of tin. Besides this lode we have cut a new lode in the 24 fathom level, west of Carthew's shaft, with rich branches of tin: in the last month two men have broken on this lode 25 sacks of tinstuff, worth 26l.; this lode is all in whole ground. There is no doubt of this being a good mine.

PETER TAVY AND MARY TAVY CONSOLS.—I stated in my report of the 5th inst. that the lode in the engine-shaft was rather disordered by a branch of spar. We have taken down the lode, and I am happy to inform you that it is looking well—in fact, it never presented a more healthy appearance than at present. During the past week the ground has greatly improved in the shaft; I consider the character of the ground, as at present seen in the bottom of the shaft, indicates a still more productive lode in depth. The shaft is sunk 13 fms. below the 32 fm. level; I hope we shall get it sunk to the 47 fm. level in about a month from this time, when we shall at once, or as soon as the shaft is put in order (that is, the converting the drawing lifts into a plunger lift), commence driving both east and west at that point on the course of the lode. I expect the masons will commence walling the new wheel-pit early next week, when we shall commence driving east an adit level on the wheel-pit lode. The castings for the new machinery are in a forward state.

RIX HILL.—At middle shaft, sinking below the 50, the lode is large and promising, but not rich. The 50 east is more kindly as we approach the north wall. Nothing to notice in our tribute department. Our last parcel of tin weighed 7 tons 11 cwts. 1 qr. 11 lbs.

SOUTH OF SCOTLAND.—We have met with an opening by the side of the south shaft while sinking, which brought in a quantity of water, and will require a few days to stope and clear away the ground, in order to bring the water to the level, consequently the sinking will be at a stand until this work is complete. The orey ground still continues productive, so far as we have opened, and will yield a fair quantity of ore. I think we shall have between 20 and 30 tons ready for market by the latter end of August, probably more.

SOUTH TRELAWNY.—The cross-cut is still driving west with six men ground rather sparey for cutting in. We have also cut in 4½ fms. All other places are in regular course of working.

TAMAR SILVER-LEAD.—The engine-shaft is sunk 1 fm. 2 ft. 6 in. below the 205 fm. level. In the ends driving south in the 205 and 190 we have not broken down any lode since last reported on. In the 175 end the lode is 18 in. wide, 1 ft. of which is good work. In the 160 end the lode is 3 ft. wide, producing work of a moderate quality. In the 145 end the lode is small and unproductive. At the north mine, in the 90 end, driving north, the lode is 3½ ft. wide, composed of capel and fluor-spar, with ore disseminated throughout. In the 80 end the lode is 18 in. wide, and yielding work of a promising character. We sampled on Saturday, the 5th inst., computed 75 tons of rich silver-lead ores, samples of which have been sent to the different smelters.

TINCROFT.—Highburrow tin lode, in the engine-shaft sinking below the 152, at 40l. per fm., is 4 ft. wide, worth 15l. per fm. In the 152 east, driving at 16l. per fm., no lode taken down since last reported; by extending this end about 10 fms. we shall get under the run of tin ground seen in the bottom of the 142. In the 142, driving east of Martin's east shaft, at 6l. per fm., the lode is 4 ft. wide, worth 12l. per fm. In the 133 east, driving at 7l. 10s. per fm., the lode is 3½ ft. wide, worth 14l. per fm. Chappie's lode, in the 120, driving west of downright shaft, at 10l. per fm., is 2½ ft. wide, worth 18l. per fm.; we have communicated the above shaft with this level. In the 110 east, driving at 8l. per fm., the lode is 3 ft. wide, worth 6l. per fm.; in the west end, same level, driving at 9l. per fm., the lode is 3½ ft. wide, worth 10l. per fm. Grout's lode, in the 80, is 4 ft. wide, worth 18l. per fm.; we have communicated the winze sinking below the 70 to the 80, and shall now commence to take down the lode; the pitches on this lode continue to look well. On North Tincroft lode, in the engine-shaft sinking below the 110, at 22l. per fm., is 2 ft. wide, producing good stones of ore. In the 110 east cross-cut we are expecting daily to cut the lode; in the west end, same level, driving at 14l. per fm., the lode is 3 ft. wide, worth 5l. per fm. In this end we have to drive about 7 fms. to get under the run of ore ground seen in the bottom of the 100 fathom level. In the 100, east of Willoughby's shaft, driving at 10l. 10s. per fm., the lode is 2 ft. wide, but poor; in the west end, same level, driving at 7l. per fm., the lode is 2½ ft. wide, worth 20l. per fm. About 8 fms. west of the present 100 end a winze is sinking below the 90, at 4s. in 1l.; lode 3 ft. wide, worth 30l. per fathom.

TREBELL CONSOLS.—There is no alteration worthy of notice since last pay-day; the end is still going on by six men on the north part of the lode, which is good saving work. I expect by the end of this week they will have driven nearly far enough to rise against those in the gossan—who are driving towards them; the back of the end is about 10 feet below the old workings; it is intended to haul this, and when it

is done we shall strip down the lode throughout the former drivage. In driving on the lode we have not carried more than one part of it in the end; we shall be able to break down the other part much faster, and also be in a proper condition for stoping west. We have also good tinstuff in our operations in the gossan, and shall be able to break work very fast when this ground is holed: at present the men in the end have to wheel their stuff a pretty long distance, and those in the gossan have to draw theirs by tackle; this will be too slow when these workings are communicated. We should have immediately a small whim for one horse erected, as the depth will be nearly 8 fms.—the depth will produce a very large quantity of tinstuff, that will well pay for stamping; also an engine-shaft sunk much deeper than the bottom of the adit; it must be sunk deeper than that to get water for the engine, and for grate work for stamps. When erected, should the mine increase in richness as it is deepened (which it is very reasonable to expect, as the bottom of the adit when holed will be something short of 8 fathoms) the shaft should be continued. I have named in former reports that we have another very large lode, containing tin throughout, and but a little distance from where I expect a shaft will be fixed, and a cross cut be driven from shaft to intersect this lode. No time should be lost in getting an engine, as the surface work can be done much cheaper now than in the winter, and whatever quantity of tinstuff may be raised, none can be brought to market unless stamped. I believe that after the necessary erections are paid for there will be but little, if any, further capital required, even if there be no further discovery. We have two men costeaning for Wheal Messer lode; it passes through the north part of Trebell Consols, which almost adjoins Wheal Messer.

TRELAWNY.—Trelawny shaftmen are still cutting ground, but will commence to fix the lift to-morrow (July 16), and by the latter part of this week I hope they will be in a position to commence the cross-cut towards the lode in the 107 fm. level. In the 92 end north the lode is 3 ft. wide, and worth 8*l.* per fm. In the south end in this level the lode is of just the same size and value. In the 82 end north the lode is 3½ feet wide, and worth 14*l.* per fm. In the 72 end north the lode is 4 ft. wide, and worth 7*l.* per fm. At the north mine, in the 78 end, north of Trehane, the lode is 2 ft. wide, and worth 6*l.* per fm. The lode in the 68 end north of ditto, has improved since last week, and is now worth 6*l.* per fm. At Smith's shaft the men are still employed sinking for bearers and cistern. In the 56 end, north of ditto, there is not yet any improvement. The stopes are not yielding quite so much lead, being hard, as noticed in late reports.

TRELEIGH CONSOLS.—Christoe Lode: In the 90 fathom level, west of Garden's, the lode is 2 ft. wide, worth 35*l.* per fm. In the winze below the 90 fm. level the lode is 2½ ft. wide, worth 14*l.* per fm. In the 80 west the lode is 15 in. wide, not much ore. In the 80, east of Christoe, the lode is 18 in. wide, with good stones of ore, and is looking more kindly.—Parent Lode: In the 64 cross-cut, north of Parent engine-shaft, we are driving to cut Parent lode. In the 64 cross-cut south we are driving to cut the middle lode; in the 64 fm. level east the lode is 2½ ft. wide, with good stones of ore.—Middle Lode: In the 40 west of cross-cut the lode is 15 inches wide, but little ore. At Burgess's shaft, below the adit, the lode is 18 in. wide, with stones of ore.

TREVILLE (SILVER-LEAD).—Since last report, the 22 fm. level has been driven 7 fms., making altogether 14 fms., partly by the side of and partly in the lode. We have just now cut into the western wall of the lode, which I find very soft killas, of the most congenial nature for lead ore. The lode is not so large as where last cut through, being 7 ft. wide, presenting a very flattering appearance. No doubt but as we continue driving under the high backs of gossan, we shall find the lode leady. The 5th inst. being our usual pay and setting day, the following bargains were let:—The engine-shaft to sink by six men, at 7*l.* per fm., for the month; the 22 fm. level to drive south by six men, at 42s. 6d. per fm. for the month, the landing by two men, 12 hours' core each, at 5*l.* for the month, all the sawing at 2s. 9d. and 2s. 2d. per 100 ft. line; the whim drawing at 5s. for 12 hours; cart work at 6s. 6d. and 4s. per day of eight hours; all the materials to draw from the different quays at 8s. 4d per ton. Our machinery works well—water-course now six strokes per minute. I hope next week to be able to send you lead.

— *July* 16.—Since I last reported on the 9th inst., we have made good progress. Our engine-shaft is sunk 7 ft. through a very good stratum. The 22 fm. level has been driven 2 fms. 2 ft., and would have been driven further but the air is very dead, and, therefore (until the air pipes are complete), we have taken part of the men from the end, and put them in the shaft, consequently we have three men and one labourer in the end, and eight men in the shaft. The lode in the end is without alteration. The water-course is as last reported.

TYWARNHAYLE.—Bennett's shaft, sinking below the 90, is improved—lode 3 feet wide, producing 4 tons of good ore per fm.; the 90 east is yielding 5 tons per fm. The 80 east, 1½ ton per fm. The 60 east, 1 ton per fm. The lead lode in Nancekuke is still looking well. In Wheal Clarence shaft it is producing ¼ to ½ ton of lead ore per fathom. Our next sampling it is expected will be about 600 tons of copper ore and 20 tons of lead ore.

WARLEGGAN CONSOLS.—The work in the mine is progressing very favourably. We expect to put the new wheel to work in about a week from this time. The engine-shaft is 7½ fms. below the adit, and we are happy to say the ground in the bottom is much easier than it has been, so that we hope to reach the 12 fm. level in less time and at less expense than we contemplated. Capt. Veller, of Par Consols, has been underground here to-day (July 12), and is much pleased will all he saw—to use his own words, he found the prospects much better than he expected. The new wheel is a very substantial, well-built, first-rate article.

WEST GOGINAN.—The lode in the engine-shaft still continues from 5 to 6 feet wide, composed of killas, gossan, jack, and spotted with lead ore. The lode in the deep adit level, driving east from the old shaft, is much the same in appearances as reported last week—large, and spotted with lead.

WEST WHEAL JEWEL.—The 85 fathom level, west of Williams's cross-course, on Wheal Jewel lode, is worth 9*l.* per fm. No lode taken down in the winze below the 70 west in the past week; when last taken down worth 5*l.* per fm. In the 57 fm. level, west of Hodges's cross-course, on Tolcarne, the tin lode is worth 5*l.* per fathom. The pitch that was set in the back of this level at 6s. in 1*l.* is given up. We have put four men to rise on Hodges's cross-course, to communicate this rise to the 42, which will enable us to set this ground on much lower tribute. In the 57 east lode not taken down in the past week. The 42 west of Quarry shaft is worth 15*l.* per fm. The stope in the bottom of the 12, west of Tregoning's winze, is worth 20*l.* per fm. No lode taken down in either of the pitches in the bottom of shallow adit, on Tolcarne tin lode, in the past week. These stopes are working on tribute.

WEST WHEAL TOWAN.—The sinking of Taylor's shaft is going on favourably, and a proper depth for a 40 fm. level will be reached in about three weeks. The 20 fathom level, west on Middleworks lode, has cut another part of the cross-course, which has heaved the lode further south; the lode produced some good copper ore between the two parts of the said cross-course, and it is thought that it will be found productive west. The driving of the 20 fathom cross cut north and adit south is proceeding favourably, in good killas.

WEST WHEAL VIRGIN.—We are clearing up the east shaft on the north lode; from all we have noticed on this lode we are expecting great things. Here reports say that one pare of men were working in one pitch 16 years—in fact, we can see the ground has been all worked away for a great number of fathoms in length. In the 19 fm. level, east and west, we have tin.

WHEAL ANNA CONSOLS.—We have sunk and timbered the new engine-shaft on Thomas's lode about 5 fms.; the water is quick, but it is intended to sink as deep as possible while the engine is erecting. Thomas's lode, in the adit level, is worth about 5*l.* per fm., and the last price given for driving was 30s. per fm. From information received from a very old tin streamer, we have discovered another lode about 20 fms. to the north of the Old Wheal Anna engine-house, which has never been worked below the old streamers' tye; it contains tin, and is kindly, and we intend to sink on it. The carpenters and smiths are progressing with their work, and the engineer has engaged to get the engine to work as soon as possible. We are using every exertion to get into full operation, and have no doubt but Capt. Puckey's opinion, that he does not know a better investment for capital, will be speedily realised.

WHEAL AUGUSTA.—In the 80 fm. level, west from the engine-shaft, the lode is 5 in. wide, with tin. In the 30 fm. level east we have cut a cross lode, which is looking well. In the 18 fm. level west the lode is 16 in. wide, with tin; in the 18 fathom level east the lode is 2 ft. wide. The tribute pitches are looking well. On the new east and west lode we have fine stones of tin. The mine is looking very well. We have now a good quantity of tinstuff at surface.

WHEAL CREBOR.—The engine has arrived from Morwelham, and we are busily engaged in drawing the same to the mine. I hope to have the whole of the granite here this week for the loading. The shaftmen have been engaged in cutting ground for the cistern, and putting in bearers, &c., to send out pitwork; the capstan and shears are completed, and the rope put on it last Saturday, and hope in a few days to begin sending down the pit work. There is no material alteration with the tributers since my last.

WHEAL EDWARD (CALSTOCK).—The lode in the shaft still keeps its regular size, the leader part is about 8 in. wide, nearly solid for copper; there are many other branches in the lode that are nearly solid, and I have no doubt they will soon fall into the present leading part, and make a good course of ore.

WHEAL HAMLYN.—This mine appears to be looking a little better; the lode in the adit end is not so hard. I think in about another week, if we have air to work, that it will look much better still; but for the last three weeks it has been very bad, on account of so much dry weather, and no surface water to force air into the end. However, I have now put two men to sink after an end on the course of a very large east and west lode towards the old shaft, where we first sunk in the quarry to ventilate it, that we may drive west on its course, until we get opposite the adit end, when we shall drive south and hole. This lode underlays south, and the one in the end underlays north; consequently, they will come together in depth, perhaps about 10 fms. below the adit; neither of those two lodes are named in the plan. I hope to have a better report to send you next week. I have engaged with Messrs. Ham and Co. for them to take up the stuff from the two men in the quarry, and to give them 3s. for 20 loads, which I think to be very reasonable.

WHEAL LANGFORD AND BARING UNITED.—Since my last we have sunk Dare's shaft 4 ft.; the ground is of a favourable character, but an increase of water. The branch that I named in my report of the 26th June (14 in. wide), I then stated was underlaying 6 ft. in a fathom, which branch is now 2 ft. wide, only underlaying about 2 ft. in a fathom, thickly impregnated with mundic and copper ore of rich quality; there are also many other small branches in the shaft, some dipping north and some south, with small leaders of rich copper ore from a quarter to half-an-inch thick. These things look well, and we hope ere long to have something better to communicate, as we find stronger indications of a good mine every fathom we sink. The engine-house is covered in, and we are quite ready for the engineers to commence to heave in the engine. I am daily expecting the engineer (Mr. Mathews), to make arrangements, when we shall commence. We have not taken down any of the silver lode since my last. No alteration at Wheal Baring since my last report. We have commenced dressing, and hope to have 5 tons of silver ore more prepared for the market in the course of a fortnight.

WHEAL MARY ANN.—Pollard's shaft is sunk 6½ fms. under the 70 fm. level; the lode in the 70, north of the shaft, is 2 feet wide, and worth 7*l.* par fm. The cross-cut south of the shaft is now holed to the winze, and we have commenced driving north and south of the winze, where the lode is 2 feet wide, and worth 9*l.* per fm. The ode in the 60 fm. level, south of the shaft, is 4 feet wide, and worth 7*l.* per fm. The lode in the 50 fm. level, south of the shaft, is 2½ feet wide, and worth 9*l.* per fm. The lode in the winze sinking under the 60 fm. level, north of the shaft, is 2 feet wide, and worth 7*l.* per fm. The sinking of Barratt's shaft is at present suspended, on account of the water. The lode in the 70 fm. level, south of the shaft, is 4 feet wide, and worth 15*l.* per fm. The stopes throughout the mine are producing much as usual.

WHEAL UNITY CONSOLS.—Williams's engine-shaft is down to the 60, and after driving south about 3 fms., we intersected the lode nearly 4 ft. wide, containing good stones of grey and black copper ore, mundic, and spar, the south portion excellent work for tin, and worth altogether about 10*l.* per fm.: this ground may be driven east and west for about 40s. per fm. In the 50 east the lode is 3 ft. wide, worth 6*l.* per fm. In the 50 west the lode is 2 ft. wide, rather more settled, and producing good tinstuff, worth 5*l.* per fm. In the 30, east of Buckley's, the lode is hove by cross-courses; we have this day (July 14) cut the lode again 2 ft. in, and not arrived at the south wall; it contains spar, prian, mundic, some stones of copper ore, and capital work for tin, altogether loaded with mineral, and very encouraging. The rise in the back of the 20, east of Buckley's, is not yet holed to the 10, but expect to do so daily. In the winze in the bottom of the 10, west of Gray's, the lode is 2½ ft. wide, producing good work for tin, set at 8s. in 1*l.* tribute. At Lambo, the sumpmen belonging to Kenworthy's engine-shaft have been engaged for the last week clearing up Tweedale's shaft from the 30 to the 40, and having now accomplished that task we shall commence driving to-morrow (July 15) east in that level, and after opening about 15 fms. of ground we shall get under the rich course of ore gone down in the bottom of the 30 fm. level. No doubt I shall have this ground driven at 40s. per fm. In the winze in the bottom of the 30, east of Kenworthy's, the lode is 1 ft. wide, and worth for copper from 10*l.* to 12*l.* per fm. In the cross cut towards Hampton's the men are going on with all speed, but have not reached the lode. We cannot possibly be far off from the desired object, and feel very anxious to open upon it, fully expecting a good lode there.

— *July* 16.—I am glad to inform you that the lode in the 60, east of Gray's, is better than ever. On our first opening upon the lode at that point, on Saturday, we could not discover any great quantity of copper ore, but it is rich for tin, &c. I have had a sample assayed, and the produce is 11½ for copper; this has astonished everybody who saw it, and the lode at this moment is still better—some beautiful stones of black asphalte and grey oxide of copper; and (speaking within bounds) I believe this lode to be worth 20*l.* per fathom, and I think it likely to continue good.

WHEAL UNY.—On commencing to drive the cross-cut north of Old Uny lode, in the adit level, we met with what we judged to be a branch, but on cutting through we found it to be a well-defined copper lode, 2 ft. wide, underlaying south about 2 feet 6 in. in a fathom, composed of gossan, quartz, peach, mundic, and rich stones of copper ore, specimens of which we shall forward for your inspection. We are not certain that it is the same lode we intended to have driven the cross-cut for, if so its bearing is more to the south of east than in the level, where we dialled it to the west. We shall also send some stones of copper ore of very superior quality, broken out of the eastern end about 40 fms. to the west of the cross-course, on the lode we reported the 30th May, 23 fms. north of old engine-shaft, and 9 fms. north of Old Uny lode; at present the lode in the end is 4 ft. wide, 9 in. of which is much the same in character as the specimens we shall forward you; the remainder of the lode is peach, prian, quartz, gossan, &c., a very promising lode, and from the above indications we may reasonably expect favourable results at a deeper level. The engine-house and stack are completed—we are now waiting for the engine. The masons are now engaged in building walls for timber and iron yards. We have put on four labourers more to clear out foundation for boiler-house, &c. Our other operations are just as last reported.

WHEAL VENTON.—Our north end still produces a tolerable quantity of lead, where the lode is also large, and of a very promising character, and, on the whole, it is better than we have before seen it; in our south end it is of a fair size and regular; but up to this time we have seen no lead in it; but the course of the lead we have in the north end is fast inclining south as it goes down, so that it may be regarded as certain that we shall have it here also in the 40 fathom level. The shaft continues to progress very satisfactorily; we are now down about 6 fathoms below the 30 fm. level; the ground still easy for sinking and congenial for lead.

WHEAL VICTORIA.—Since my last report the deep adit has been driven northward on the western cross-course 2 fms., and the shallow adit southward 3 fathoms—the ground in each level continues much the same as last reported. The shallow adit driving at 50s. and the deep level 90s. per fm. We have decided on sinking a permanent shaft in the eastern cross-course, and we are now searching for a position to fix it in, that we may take in the Lark Holes lode at some 40 or 50 fms. deep; as soon as we have fixed on the spot we will communicate the necessary information.

WHEAL WILLIAMS.—We have cut down the south lode engine-shaft about 10 fms. from surface; the lode in the ends of the shaft is from 3 to 4 ft. wide, composed of gossan, quartz, capel, and spots of copper ore—altogether a very kindly lode. The shaftmen are getting on with their bargain as fast as possible.

WHEAL ZION.—The great lode at Lemon's shaft is cut through at the 12 fm. 4 ft. level from the surface, and is there 12 ft. wide; in the middle of it is a good course of black oxide of copper, which will be taken away at a small tribute as soon as the shaft is found deep enough to drain that part of the lode, so as to enable us to save the ore in a comparatively dry state. Lemon's shaft is again sinking below the 12 fm. 4 ft. level, and is now down 3 fms. below the level, at 5*l.* per fathom, and the cross-cut at that level is now in 2 fms. beyond the south side of the champion lode, in good soft, juncky-formed killas, of a light grey colour, such as is found in all good Cornish mines at a similar depth and granitic locality, in driving which we expect to cut the south champion lode in a few days. Bray's shaft is timbered and completed in good order 10 fms., the water therein having increased in consequence of meeting with several branches between the two great lodes; six men are employed to work night and day, at 3*l.* per fm. The shallow adit is driving on fast at 17s. and 15s. per fathom. We have now three other copper lodes within 3½ fms. of each other, 100 fms. south of the champion lodes; the south one dips towards the north, the north one dips to the south, and the middle one is nearly a perpendicular lode; they are all small, but of good character, and each containing ore; at the depth of 6 fathoms they will form a junction, in the centre of which ground a shaft is commenced, and at the depth named we shall find a great, if not a good lode. Yesterday (July 15) we found a splendid lead gossan passing from Wheal Zion into Wheal Arthur on the north, and the Bearalston mines on the south, which lode will be seen with the before-mentioned three lodes, and other lodes lying south of them in our deep adit. We are preparing to erect our whims, and hope to get them into working order in another fortnight. The amount of June cost is 130*l.* 3s. 5d., all paid.

FOREIGN MINES.

ALTEN MINING ASSOCIATION—[Estimated produce for June.]

Mines.	Tons of Ore.	Per Cent.	Fine Copper.
Raipas	20	5	1·000
United Mines	11	5	0·550
Old Mine	112	5½	6·160
Michell's	3	6	0·180
Mancur's	4	7	0·280
Total	150		8·170

Mining Report from the 17th June to the 3d July.

Raipas.—In the 15 fm. cross-cut the ground wears much the same appearance as mentioned in my last, occasionally showing some patches of purple ores, though not in sufficient quantity to admit of its being separated. In the stope in the bottom of the winze in the 15 the lode has much increased in size, containing rich purple ores of an improved per centage: the ground, however, being rather hard, will prevent our making any large returns at present. In the roof stope in the 10 the ore has become very unsettled; the ground is also hard, and unfavourable—the returns from this place will be very limited. In the 20 the water has considerably fallen back, and we expect by the end of the week to be able to resume the bargains, which we were compelled to abandon, in consequence of the inundation previously alluded to.

United Mines.—Since the surface operations have been resumed the prospects have somewhat improved, and the returns, in proportion to the number of hands employed, have been more profitable and satisfactory. A new lode has been uncovered at the surface, which is looking promising, and the tributers are producing some excellent gossan ore of a superior quality.

Old Mine.—The favourable prospects alluded to in my last report in the north stope continue equally flattering, although no further improvement can be noticed. The western stopes in this sink still holds good; the prospects have undergone no change; the returns are, as usual, good. The workings in Slungi's sink have been unproductive; the lode has latterly much increased in size, and consequently the ore is not so compact as heretofore; we have, therefore, been obliged to make an alteration in this bargain, and instead of carrying all the lode we shall confine the workings to the bottom wall, where the ore is most regular. The lode recently discovered under the Old Mine hill is still poor; it, however, contains spots of ore and gossan, which may improve and become more regular as we proceed. A junction has been effected with the deep adit since my last report, which has come out correctly; we shortly hope to resume operations on the lode in the shaft, where we expect the returns will be remunerative. The ground in the adit still continues hard, and no further alterations are to be noted there at present.

Michell's.—The surface operations at this mine are promising, and the tributers are making some fair returns of ore.

Mancur's.—The prospects of the new lodes at this place are good, and the tributers are collecting some small parcels of good quality ore from this mine.

AUSTRALIAN MINING COMPANY:—

The 20 fm. level, south from Ansty's engine-shaft, is now driven 10½ fms., and the lode is not yet cut, although the dip of the lode, as proved so far as the 10 fm. level, which is 2 ft. 8 in. per fm., shows that should such rate of inclination continue from 10 to 20, it should be now intersected. There is certainly a bare possibility that the lode below the 10 may have a greater dip, and prove to be the lode cut through in sinking the engine-shaft, which is to be seen some 13 fms. below the adit; but should this prove to be so, the change in the underlie must be from 2 feet 8 in. to more than 5 feet per fm. All I say is, that the lode in the 10 fm. level is now dipping from 3 to 4 feet in the fathom, which makes it a doubtful question if we have the lode to cut in the 20 cross-cut south, which only time can determine. Masterman's shaft is now from 4 to 5 feet below the 10 fm. level, and is still being sunk in the stratum, the lode remaining unbroken in the western side. Wotton's shaft is now 32 fms. 4 ft. 6 in. below the surface of the ground, being somewhat harder than usual in past month, but the ventilation is rather good, notwithstanding the hot winds. The 10 fathom level is commenced to drive east from Ansty's winze, the lode being 4 feet wide, and will produce about 2 tons per fm., all of which being scattered must go to the stamping mill. The lode in the 4 east is promising, but rather in disturbed ground, at this time producing, however, some work for the stampers. In the 15 the lode is 4 feet wide, and contains good stones of ore imbedded in a beautiful dark brown gossan, promising greater produce at a deeper level. We are still driving at a deeper level. Baker's and side lodes run parallel and in conjunction with each other, there being a regular and well-defined wall between them in the 10, north from Stephens's winze, being in all 4 ft. wide, and will turn out 2 tons per fm. for the stamping mill. The lode in the adit, on Alexander's lode, contains some stones of ore, is composed principally of hard quartz, and not very promising at this mine. Produce of the mine:—Total, 21 cwts. sent to the port from the commencement—say, 26; 773; ditto 18; 189; ditto 22; 23. Now on the floors ready for cartage, 20; ditto not ready, 2=1007. Halvans now on the floor, 1000; raised from commencement, 2007. The total raised is the same as last month, the tributers having been employed dressing their ore in February.

WORTHING MINING COMPANY (near Adelaide, South Australia).

Extract from letter from the Colonial Committee of Management, dated 7th March:—South End: Middle Gully is being continued, and appears about the same, alternating from hard to soft country; this work will be of permanent utility, or we should not carry it on at present, but we feel it desirable to keep on two sets of miners, by which we consider a great saving is made in the setts, and much delay spared that would necessarily occur in looking out for fresh hands. The engine-house continues to proceed satisfactorily. We also beg to enclose you a duplicate bill of lading of a box of specimens of ores shipped, per *Tiglioni*, to London; these have been forwarded with the view that you may have all the possible acquaintance with the workings. The specimens No. 1, are from above the flookan, at the water shaft, where we have commenced driving; No. 2, are from under the flookan, in what Captain Richards considers probably to be country spar; No. 3, are surface specimens from same lode, about 30 fms. south of the shaft; No. 4, are from the south end Middle Gully; No. 5, are specimens brought in by Capt. Richards from his exploring expedition, and respecting which we enclose you his report.

Monthly Inspector's report for January, dated North Adelaide, 21st February:—The water shaft is now 35½ fms. deep, perpendicularly; we have met with an extra regular nodule of spar under the flookan, of several feet in extent, around which the flookan has crept, as if to exclude it from the lode; it has, however, spots of copper in common with the lode. The figure will show you that the flookan is regaining its position. We have not seen through the lode at some points. I think the present bottom of the shaft is as well for ore as last month, exceeding anything previously. Deflections and irregularities are, according to my experience, desirable. I quote Reeves's lode, in East Crofty, South Frances, and East Pool, and I know of many such cases.* We have seen lode 2, at Alfred's, as deep as the water will admit, about 6 fathoms, and with the same uniform results—viz., specks of yellow sulphuret of copper in a large hard lode; so general a dissemination of copper at and near the surface only makes me the more impatient to arrive at working depths. We have driven 2 fms. more in the Middle Gully, south end, just 40 fms. in all: the last specimen of sulphuret taken from within 2 feet of the present end, is the best they have ever shown me. In last month's driving we have met with an ore, I think, of iron; I would call it either a white hematite or clay-stone, judging from its form, weight, and adhesion to the tongue.

Worthing Mine, Feb. 24.—The water shaft is being sunk 3 fms. 4 ft. 8 in., and is now worth 18*l.* per fm.; the lode in this shaft is disordered by harder ground than usual, from the west, which threw the flookan in a more horizontal direction over a spar, which is about 4 feet wide, and which I am inclined to think is a country spar—that is, a spar which does not belong to the lode, and which seems already to decline, and killas taking its place, and the flookan again resuming its former inclination—an angle of about 45. Lodes sometimes after a disorder become more productive. In consequence of this slight disorder, it is thought advisable to sink deeper before driving through the lode eastward. Alfred's shaft is being sunk 4 feet 7 inches; and after cutting through the lode, which is about 2½ feet wide, and rather disordered, but containing specks of yellow ore, we were obliged to suspend it in consequence of too much water, and employ the hands in the south end, at 18*l.* per fathom, which is being driven 2 fathoms, and is now worth 7*l.* per fathom; the lode in this end still continues hard, and contains specks of yellow ore and mundic.

LINARES MINES.—The following has been received from Capt. Curry:—

Linares, July 5.—The sinking of San Thomas engine-shaft is still going on well; it will be completed to the 55 at the end of this month, as stated to you on a former occasion. The 55 fm. level, west of Wilson's shaft, has improved during the week; it is now producing 3 tons of lead in a fm., and showing indications of further improvement; in the same level east (as explained to you by Mr. Thomas) our men are employed stoping down a piece of ground left standing on the side of the old men's workings about the Tanteo winze: this we wish to see done before starting our end eastward, to determine whether to carry the whole of the lode or a part only: here we have a fine course of lead, and expect three Englishmen, with three Spanish labourers, will raise from 40 to 50 tons of lead for the present month. In the 45 fm. level, east of Shaw's shaft, we have again resumed driving on the north part of the lode; this has shown some little signs of improvement during the present week; it is now worth 1½ ton to the fathom, and is opening tribute ground; in the same level, west of San Juan shaft, we are passing through a fine and promising lode, composed of splendid gossan, with a leader of lead, worth at present 2 tons per fm.; we are of opinion that under this place, in the next level, we shall find a very productive lode. In clearing east of Shaw's, in the 31 fm. level, we have not met with anything worthy of notice for the last two or three weeks; the both walls left standing show that the men of old must have had a very productive lode about this place, and we have not the least doubt but a good lode will be found in the bottom of these old workings, as every inch we have cleared to the bottom in this direction has shown a fine course of ore. Shaw's shaft is much as usual, passing through a large lode, but at present hard and unproductive. I am glad to say our tribute bargains still continue to look well; we have now 16 contracts, at an average tribute of 29s. per ton (according to our estimate of raisings), dressing included. Our raisings for June are a little short of calculation—viz., 142 tons, but our raisings for the current month we expect will be over 160 tons. Ore weighed in July 5, 31 tons 2 cwts.; total in stock, 1016 tons 12 cwts.; pig-lead smelted, July 5, 23 tons 9 cwts.; total in stock, 130 tons.

IMPERIAL BRAZILIAN MINING ASSOCIATION—[Received July 12.]

Bananal, May 28.—We have been much disappointed in the returns from the ground between the 14 fm. levels; but as to the propriety of sinking Gibson's shaft to another level (the 34), I think there can be no doubt; and, in support of this opinion, I beg to hand you the following statement of circumstances:—

1. In driving the 24 fathom level (as you have been repeatedly informed), we passed through a shoot of gold in the Big Pump vein, which yielded, in merely going through it, 8 lbs. of gold, and its appearance, when at its deepest point, was very encouraging; but, in consequence of the immense quantity of water flowing through the 24 fm. level, we cannot follow it in depth, without previously sinking the shaft, in order to drain it.

2. Thomas's main vein has been followed down to as deep as the bottom of the 24, and has gradually improved since we have been operating on it, both in appearance and produce. At present, in the bottom of the level it is is much larger than usual, and on Monday last we dug it down as deep as the water would allow us: it produced a little work for the washing-house, and is still showing further symptoms of improvement. The smaller veins are also of a promising nature.

3. The shaft is now 4 fms. below the 24 fm. levels; the ground in it is tolerably favourable for further progress, and lately we have found some small samples of gold, which probably were produced from an upshoot from one of the principal veins, and was seen by us in the level above.

4. We have ample power and every requisite to enable us to reach another level, without any further outlay for materials, &c.

5. The mine cannot be pronounced to be thoroughly proved without the veins are operated on and examined at a greater depth than our bottom level.

The captains, you will please to observe, fully coincide with me in this opinion; they also give their reasons for so doing. The past month's operations have not been very productive; we have had, however, several boxes of work for the washing-house, which, although not rich, has shown a decided improvement in the vein. The other places at work in the back of the 24 continue to yield stamping work, but of rather an ordinary character. By contracting the length of Gibson's shaft a little, we shall avoid some very hard ground. I hope our future progress will be more rapid. The sinking of this shaft to the 34, and the intersection of the veins at that level, being our principal object, every exertion and means will be used to facilitate it as much as possible. All our machinery is now performing its work admirably.

I visited Gongo last week, and selected the site for the new stamps below the Cata Grande, and have taken all the necessary measures for its speedy erection. The old Cata Preta axle, which I sent from hence, will be used to build the wheel on, and the tree for the stamps axle has already been felled. I hope in my next to be able to report this machine, with 12 heads, to be near its completion. The wheel will be capable of carrying 24 heads: the additional 12 will be got ready as circumstances will allow, and if the result be satisfactory, another machine of the same description will be got ready with all possible dispatch. I intend visiting Gongo again on Monday, and shall remain there a few days, to press progress as much as possible.—J. HITCHENS.

Gongo Soco, May 27.—According to your request, I have minutely examined all the regos, and find that in many places they require clearing. There are also several fms. of launders in a rather weak state, although they may stand for some time without repairing. A level east of the tunnel has been driven 6½ fms. on the south vein, and in the track of the old level which had crushed together. The stuff taken therefrom, when washed in the batea, occasionally shows a few particles of gold. Several long cap pieces have been fixed in the tunnel, in order to turn the road on the course of the old workings. The Joinville stamps have been completed, and the 30 heads are now at work. The jacotinga for the stamps has been taken from the following places:—For the Great Western stamps, from Morgan's burrow and carrego; Hochieder's stamps, from Duval's burrows and carrego, and near Williams's shaft; Goldsmidt's stamps from near Walker's and John's stamps, and Walker's and Joinville's, from near Hochieder's shaft.—B. GUY.

Bananal, May 28.—The adit north of Blaney's shaft has been driven through the cross-course to the jacotinga, where it is so soft and saturated with water that we have the greatest difficulty to penetrate it. At present it is suspended, until the ground shall have drained itself, and that we can spare some of our best qualified men to proceed with it, which may be done when the water happens to be in the bottom parts of the mine. The cross cuts east and west opposite the shaft are also suspended, the former having entered the clay-slate, the latter being near the foot wall of the formation, and in hard ground. We have, since the suspension of the last-named places, driven eastward on two cross-courses, intersected in the adit previous to Blaney shaft being holed, both of which have proved unproductive, and present no encouragement to follow them further. A little of the vein has been stoped in the back of the level near Wray's, where samples of gold were obtained in the driving; but so far it has been poor, showing only a few particles, similar to those the level produced when passing through it.

2. Thomas's vein, about 4 fathoms below the 14 fm. level, north of the shaft, has been cut, and is being opened on towards that level, and, when communicated, will be in a proper state for working on the shoots a little to the north of our present position; the vein at present is producing work for the stamps.

3. Thomas's vein, and the continuation of the shoot on which Thomas's shaft was sunk, have given several boxes of work for the washing-house, besides stuff of fair quality for the stamps; and although the vein is not rich, a decided improvement has taken place in its appearance since our first clearing up the bottom of the shaft, for at the period there was nothing to be seen more than a few particles in the vein, suitable only for the stamps, at present it is large, and producing gold to the bottom of the 24, where it has been worked as low as the water will admit of, and here it is found in strong rough particles disseminated throughout the vein.

4. The rise in the back of the 24, on the Big Pump vein, was holed on Saturday last to the stopes above, which will be now worked to a better advantage, and will yield us work for the stamps, with every probability of some also for the washing-house.

5. Gibson's shaft is about 4 fms. below the 24, ground tolerably good for sinking, with the exception of the north-east corner, which is very hard and troublesome. We have, to make more dispatch, contracted the size of the shaft to 10 ft. by 6½, which will be quite large enough for the pitwork in future. The ground broken in the last 6 ft. sinking has shown samples of gold, which has been put to the stamps, and is, no doubt, one of the small lines worked on above to the west of the main shoot.

6. Agreeably to your request, we have given the subject of continuing the sinking of Gibson's shaft to another level our careful and deliberate consideration, and the result is that we are strongly of opinion that at the present moment it would be unwise to suspend the same for the following reasons—viz.: Having new and powerful machinery, with pumps, &c., on the mine, to sink 10 fms. deeper, and more if required, the shaft already sunk 4 fms. showing a little gold at present, with one line more to pass through before the next level is reached. The fact of 8 lbs. of gold having been taken out of one of the shoots on the Big Pump vein by the 24 fm. level merely passing through it, and the improvement in Thomas's vein during the past month, are, we think, sufficient to warrant the opinion previously given. The present appearances, especially that at Thomas's vein (which has already been considered the principal point) leads us to hope that it may again resume its former rich character, rather than the contrary.

B. BROKENSHAW; JOHN HITCHENS.

	Gold Report.—Gongo.	*Bananal.*
April 27th to 7th May	*Lbs.* 2 3 13 0	10 5 9 0
17th May	2 7 16 0	
27th May	1 11 0 0	
Total	6 10 9 0	10 5 9 0
Total from 1st Jan.	37 5 18 0	41 10 0 0

NATIONAL BRAZILIAN MINING ASSOCIATION—[Received July 12.]

Cocaes, May 28.—In rising several stones have been extracted from Hamilton's stope, showing gold, and the stope never looked more kindly than at this moment. We quite hope that better things are not far distant. In driving towards the sink (1) the advancement has not been so good as could have been desired, owing to the paucity of hands that are stationed there. We are, however, fully alive to the importance of reaching the line of the vein as quickly as possible.

Cocaes produce from 23th April to 28th May	*Mrs.*	27 0 5 16
Culaba " " 26th "		9 6 3 53
Total produce for the month		36 7 0 69

Culaba, May 26.—We expect to make the communication with the winze and rise by to-morrow evening; the distance now between is 6 feet, which would have been completed two or three days ago, had it not been for some ground that gave way from the south side of the lode, and prevented us from sinking, until we secured it with timber.

* In my first reports upon the Worthing lodes, the regularity was to apply to their size, and continuosity for hundreds of fathoms, whilst the irregularity above is in detail.

ST. JOHN DEL REY MINES.—[Received 12th July.]

Morro Velho, May 8.—Produce for April 27,005 oits. = 259·43 lbs. troy weight:—viz.: 26·942 oits. from 7060 tons of ore, yielding 3·81 oits. per ton = 27,005 oits. Stamps working during the month averaged 118·53 heads.—In the supply of stone from the mine there is little variation; nor can there be much improvement until we have an accession to our manual force; meanwhile we are again indebted to our refuse heap for nearly 350 tons of stone, to make up the requisite supply for the stamps. The quality has been inferior to March, which yielded 4·04 oits. per ton, while April yielded only 3·81 oits.

Cost for April, Rs. 38,554 360, at 30d.		£4819 5 11
Produce	27,005 oitavas.	
Less duty	1,350 „	
Nett oitavas	25,655, at 7s. 8d.	9834 8 4
Profit		£5015 2 5

This profit will, I trust, give you satisfaction. It is but fair to observe that, owing to the absence of the usual monthly charges for duty and commission on shipments of gold, the cost for April has been unusually light. The current month (May) will be heavier; and in estimating the cost the fair way will be to take the average of each successive two months.

Arrastres.—Towards the Garden water course, and the branch from the same to the saw-mill, 455 fms. have been completed south. With a force of vallerois somewhat variable, but sometimes 70 men, we continue with activity these preliminary works. We are also making progress with the arrastres, to be worked in continuation with the wheel of the amalgamation-house.

May 17.—Gold extracted to date 9769 oits., from 642 cubic feet of sand (result of 11 days' stamping), yielding 15·21 oits. per cubic foot.—Stamps working 11 days, average 118·04 heads. In the supply of stone no alteration or improvement in quality.

May 23.—The troop starts early to-morrow for Rio, with 10 boxes, containing 53·21 oits., to be either shipped to your address or be disposed of at Rio—as follows:—

March produce		29,303 oitavas.
Of which the first 10 days was included in the last remittance		10,065 „
Remains		19,238 „
April produce		27,005 „
May (the first 11 days)		9,769 „
		56,012 „
Deduct 5 per cent. duty		2,800 „
Total		53,212 „

May 28.—Gold extracted to date, 18,444 oitavas, from 1235·85 cubic feet of sand (result of 21 days' stamping), yielding 14·92 oitavas per cubic foot. Stamps working 21 days, average 117·05 heads. The supply of stone from the mine may be called a shade better, and I am happy to add that within the last few days the attendance of Brazilian borers has been more satisfactory, which enables us to relax a little in our demand on the refuse heap, but the quality of the stone is but middling.

We continue to press forward with all possible dispatch the construction of the preparatory regos required for the 12 arastres proposed to be erected at a little distance from the mine. Meantime the two arrastres in connection with the wheel of the amalgamation house are progressing rapidly, and I hope to have them at work before the end of June.

In consequence of the exchange, the gold was sold at Rio, and the amount remitted home in bills, this mode being more advantageous than bringing home the gold, the 53,212 oits. having produced 20,841*l.* 7s. 4d.

LAMBEROOK WHEAL MARIA.—The general meeting advertised for the 17th inst. has been postponed, in consequence of the absence of Mr. Murray (the superintendent), to the 31st inst.; in the meantime, the latest report from the mine states that about 3 tons of tin will be ready for market by the end of the month. The ore raised thus far is estimated to be worth, when dressed, about 1600*l.*: four heads of stamps are at work, and the stamping-power on the mine will be increased to eight heads. Although the produce of the ore is lower than has been anticipated, the main features of the mine are in no degree changed. The cross-cut towards the champion lode, from the 60 fm. level, is proceeding vigorously, and the flat-rods to B lode (copper) will be at work in about 14 days, when, after sinking the shaft from the 14 to the 20 fm. level, the lode will be again driven upon, and it is anticipated by Mr. Murray that the results of both these operations will be important.

KILBRICKEN MINES.—We are assured, and can place every reliance on the information, that our correspondent who furnished us with the paragraph relative to this adventure, which appeared in last week's Journal, was in error. The mine now consists of 3300 shares, 3*l.* paid, which covered the purchase, and left 1500*l.* in hand for future working. The first year after the death of the late Mr. Crockford, this mine made a profit of 2000*l.* in five months, the last month's working giving 800*l.*; and it is generally believed to hold out very fair prospects. There is a new 66-in. cylinder engine on the mine, a 26, and a 20, with a large quantity of necessary machinery. We are invited to inspect the list of shareholders.

NORTH WHEAL TRELAWNY.—This mining sett is situate about half-a-mile to the north of Wheal Trelawny, in the lands of Augustus Coryton, Esq., in the parish of Quitheock, and county of Cornwall, being above a mile in length, and of considerable width. A grant of the above lands having been obtained by the present shareholders at a reasonable dish, an adit is now extended northward on the lode about 20 fms. into the high ground of the estate called Trehansy, in which extent the lode, which varies from 2 to 4 ft. wide, has produced a strong promising gossan, with flookan, white iron, mundic, barytes, peach, prian, and lead, and although the adit end is but about 6 fms. under the surface, it presents most favourable indications of its being a productive lead lode; and, on the adit being extended 100 fms. in its present direction, will give a back of high ground of about 25 fathoms; and, from its late improving character, fairly warrants to the shareholders the probability of their making sales of lead ore, raised at and above the adit level, to provide for machinery for its full development, as, from its position, water-power can be applied to drain the mine some considerable depth, thereby avoiding the great expense of steam erections when machinery may be required.—*July* 17.

PARKEND COAL COMPANY.

The colliery proposed to be worked by this company is situated in the best portion of the Forest of Dean coal-field, about 4½ miles from the port of Lydney, on the Severn, to which there is access by a tramway, which passes the mouth of the pit, and from whence hitherto the principal part of the produce is shipped. The opening, however, of the South Wales Railway, expected soon to take place, will offer greater facilities of transit at reduced charges, and will undoubtedly greatly enhance the returns and the profits. It appears from statistical returns that, from 1845 to 1850, Government received royalty on upwards of 70,000 tons per annum; and as 72,000 tons per annum may be raised and sold from the two shafts, this quantity, at the lowest rate yet paid, free on board at Lydney, 8s. 6d. per ton, would, allowing 1s. per ton royalty to the proprietor, and 3d. for management, directors, &c., leave a profit of 4375*l.* per annum, or 18 per cent. on the capital invested; while with perseverance and energy there is no doubt the above profits, as also the amount of sales, may be greatly increased. The Parkend coal is said to be held in very high estimation, both for steam and domestic purposes; and the three seams which have been worked—the Parkend High Delf, and the Smith and Starkey veins—are estimated to contain 2,720,000 tons of coal. The lessees of the Parkend iron furnaces, 17 years of the lease unexpired, are bound by contract to take 10,000 tons per annum, at a nett profit of 1s. 6d. per ton, but are taking 15,900 tons, and which quantity will, in all probability, be increased. The stock and plant are extensive and valuable, and the capital to be raised (25,000*l.*) is to be applied to purchase these and the good will—the former to be taken at a valuation, estimated at 16,000*l.*, leaving 9000*l.* for working capital. Should not the entire capital be raised, the money subscribed will be all returned.

ACCIDENTS.

Beer Ferris.—An awfully fatal accident has occurred at the South Hooe Silver-Lead Mine, seven miles from Devonport, by which four men have lost their lives. The principal shaft is a downright one to 95 fms. deep, where it becomes diagonal to the bottom level, 205 fms. In the 95 fathom level is an engine for drawing at the diagonal, and the level itself has served for the flue to carry off the smoke and vapours from the furnace; and, although there was an 18-in. flue, it was considered dangerous, and had since the erection of the engine ceased to be worked. Some of the men knowing there was good ore still there, applied to the agent to be allowed to work it, and were at first refused; but on pressing their request, and being cautioned to be careful, and leave instantly if they felt any bad effects from the vapour, permission was given. They worked for some time, but were at length taken ill, when one of them, N. Bartle, advised them all to leave at once, which he did, and got to the surface in safety. Unfortunately, three men, named Lockyer, Jackman, and Barry, and a boy of 14, named Down, remained, and when they did leave went in a direction where they met the vapour instead of leaving it. The consequence was they were all suffocated. The verdict of the jury was special, but equivalent to "Accidental Death;" and orders have been given that this level shall not be worked in future.

Bedminster.—A fatal accident happened at an early hour on Monday morning last, at the Northside Colliery, where 40 men were buried alive for many hours, as recorded in the Journal of 28th June. It appears it has long been the custom to have an inspection of the shaft and workings once every fortnight, and at 12 o'clock William Bolt, Edwin Javins, and J. Burstin, went down for that purpose, and were several hours engaged in their duty. About four o'clock the bell rung to bring them to surface, when the banksman was horrified at seeing them all lying at the bottom of the skip, insensible, wounded, and covered with blood. Bolt had his head awfully cut open, was otherwise wounded, and dead. The other two poor fellows were conveyed to Guinea-street Hospital, where Javins has since died, and Burstin lies in a precarious state, having received severe injuries in the back, a broken leg, and several contusions. Mr. Stewart immediately descended the shaft to ascertain how the dreadful affair happened, when he found everything perfectly secure, with the exception of an air trunk, which had been forcibly displaced, supposed to have been done by the swinging rope catching it and tearing it out, when it must have fallen on the men, and effected the fatal results. Bolt has left a wife far advanced in pregnancy and nine children, wholly unprovided for, and was one of those who so nobly assisted in extricating his fellow-men at the previous alarming accident. At the coroner's inquest the jury returned a verdict of "Accidental death," but recommended that the colliery be carefully inspected before it is again worked.

Wheal Trelowery.—A miner, named Stephens, fell down a distance of some 10 fathoms when picked up, he was a good deal cut and bruised, but is now going on favourably.

Hayle.—As a man named Gilbard, at the Copper-house Foundry, was engaged conveying a large boiler to Hallamanning Mine, he slipped, fell under the waggon, and the wheel passing over him, he was killed on the spot.

Perran Foundry.—As five men were endeavouring to move 5 tons of molten metal for casting, the power was insufficient, and two of them let go; the consequence was, Stephen Sara had his arm broken, and the others were much burned, but all are doing well.

(Continued on the last page.)

Current Prices of Metals, Stocks, & Shares.

METAL MARKET London, July 18, 1851.

ENGLISH IRON. *a*	per ton.
Bar, bolt, & square, London	£5 5–5 7 6
Nail rods	6 2 6–6 5
Hoops	7 0 0–7 5
Sheets (singles)	7 12 6–7 17 6
Bars, at Cardiff & Newport	4 10 0–4 15
Refined metal, Wales*	3 0 0–3 5
Do. anthracite*	3 10 0
Pigs in Wales	3 0 0
Do. do. forge	2 5 0–2 10
Do., No. 1, Clyde *net cash*	1 19 3–1 19 6
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 15 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0
Stirling's Patent Toughened Pigs in Glasgow	2 15 0
Do. in Wales	3 10–3 15
Staffordshire bars, at the works	5 5 0
Rails	5 0–5 2 6
Chairs (Clyde)	4 0 0
FOREIGN IRON. *b*	
Swedish	11 10–11 12 6
CCND	17 10 0
PSI	—
Gourieff	—
Archangel	—
FOREIGN STEEL. *c*	
Swedish keg	14 0 0
Ditto faggot	15 0 0
ENGLISH COPPER. *d*	
Sheets, sheathing, & bolts, *p. lb.*	0 0 9½
Tough cake *per ton*	84 0 0

Tile	£83 0 0
Old copper *e per lb.*	8¾*d*
Yellow Metal Sheathing	7½*d*
Wetterstedt's Pat. Metal† *Cwt.*	1 11 0
FOREIGN COPPER. *f*	
South American, in bond	77 0–87 0
ENGLISH LEAD. *g*	
Pig *per ton*	17 0 0
Sheet	18 10 0
Pipe	19 0 0
Red lead	19 0 0
White ditto	24 0 0
Patent shot	20 0 0
FOREIGN LEAD. *h*	
Spanish, in bond	17 0 0
ENGLISH TIN. *i*	
Block *per cwt.*	4 4 0
Bar	4 5 0
Refined	4 10 0
FOREIGN TIN *k*	
Banca, H. C.	4 1 6–4 2 0
Straits	4 1 0
TIN-PLATES. *l*	
IC Coke *per box*	1 5 6
IC Charcoal	1 11 0
IX ditto	1 17 0
SPELTER. *m*	
Plates, warehoused *per ton*	14 15 0
Ditto, to arrive	14 15 0
ZINC. *n*	
English sheet *per ton*	21 0 0
QUICKSILVER *o per lb.*	3*s* 9*d*

Terms.—*a*, 6 months, or 2½ per cent. dis.; *b*, ditto; *c*, ditto; *d*, 6 months, or 3 per ct dis.; *e*, 6 months, or 2½ per cent. dis.; *f*, ditto; *g*, ditto; *h*, ditto; *i*, ditto; *k*, net cash; *l*, 6 months, or 3 p. ct. dis.; *m*, net cash; *n*, 3 months, or 1½ p. c. dis.; *o*, ditto, 1½ dis.

* Cold-blast, free on board in Wales. † Dis. for cash in 14 days, 10 per cent.

WELSH BAR-IRON.—A considerable trade has been done during the week; the mail from Calcutta announces some large operations, which has caused great firmness in the article. In rails a large business is doing, and several heavy orders are unexecuted, both on American and Continental account.

STAFFORDSHIRE IRON is firm, several of the large houses having stopped their works, pending the adjustment of differences with the men.

SCOTCH PIG-IRON.—A good legitimate business doing; the founders are full of orders, and a fair continental trade is being done; purchases may be made at 40s., No. 1, American brands, free on board, storekeepers' warrants; ordinary brands, 39s. 6d.

SWEDISH IRON is without alteration.—SWEDISH STEEL is inquired for.

COPPER.—Some large operations have taken place in South American, at rates which have not transpired.

TIN (Foreign) has attracted considerable attention this week, and a large business, at rising prices, has been the result, about 4000 have changed hands this week, of which 2000 Straits were sold to-day at 81s., and 400 Banca at 82s. By our advices from Singapore, dated 31st May, received by the last overland mail, we find that the whole imports into that island from the neighbouring ports, during the month of May, amounted only to 230 tons, which were disposed of and shipped to the following countries:—China, 55 tons; Calcutta, 60; Great Britian, 80; Cadiz, 30=225 tons. The supplies were be coming more and more limited every month, owing to continued disturbances among the natives, and also to the prevalence of cholera among the mining population. We learn also that the supplies from Banca into Holland next year will be so limited in quantity that the annual sale in August, 1852, will not likely exceed 90,000; 84 tons 15 cwts. have been cleared for home consumption this week.

ENGLISH TIN is without change.

SPELTER.—Business has been done to some extent at 14*l.* 15s. to 14*l.* 17s. 6d. on the spot; and at 14*l.* 15s. to 15*l.* October and November delivery.

LEAD.—A good business doing.

TIN-PLATES in the early part of the week were languid: the American mail having brought unexpectedly very large orders for California, the market has assumed a better position.

GLASGOW, JULY 17.—A good business has been done in Scotch pig iron during the past week for shipment; and it becomes more apparent that the demand for it is greatly increasing at the present very low rates. The stocks are diminishing by the large shipments and local consumption; but it would be well for the makers if they would lay aside their petty jealousies, and come to some arrangements among themselves and their English competitors to limit the production, and thereby obtain a fair price, rather than throw away their ironstone, which daily experience shows cannot be replaced.

Mixed Nos, good brands, free on board here				38*s.* 9*d* per ton nett cash.
No. 1	„	„		39 0 „ „
No. 1, Gartsherrie	„	„		40 6 „ „
No. 1, Coltness	„	„		40 6 „ „

There is a fair demand for bars, and prices remain without alteration, say 5*l.* 5s. and 5*l.* 10s., 4 per cent, discount for cash. The malleable works are well employed, several extensive orders in merchant bars and rails having been recently given out for the Canadian market, and the demand for plates, &c., for shipbuilding is considerable, this branch of the Clyde trade being very active. Prices remain without change.

NEW YORK, JULY 5.—Respecting Iron, we have nothing new to report, except that holders generally are a little firmer; some further sales of Scotch pig have been made at previous rates.—Import from January 1 to June 30, 1851:—

	Bar—Tons.	Pig—Tons.	Bundles.
From foreign ports	27,746	25,728	356,726
From coastwise ditto	447	2,377	3,063
Total	28,493	28,105	359,789
Same time last year	25,117	21,840	231,180

In Lead, pig is very quiet, and we have no sales to report.—Import from January to June 30, 1851:—

From foreign ports *Pigs*	173,470
From coastwise ports	65,076
Total	238,546
Same time last year	236,464

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL,
FOR THE FIRST SIX MONTHS OF 1850 AND 1851.

Metals.	1850.	1851.	In. in 1851.	Dec. in 1851.
Spelter *Tons*	2888	2262	—	626
Copper	1971	810	—	1161
Iron, British, bars	25153	16327	—	9836
„ rails	—	5142	5142	—
Ditto, Foreign	493	182	—	311
Tin-plates *Boxes*	9437	16372	6935	—
Lead *Tons*	1321	2619	1298	—
Steel	582	246	336	—
Quicksilver *Bottles*	22	18	—	4

MINES.—The market continues dull, but without material change from our last week's report. Dividend shares are still sought for, as also the superior class of non-dividend mines; and it is almost unnecessary to add that, with very few exceptions, all others are neglected. Looking at the circumstances in which the business is placed, we incline to the opinion that it will now require some months to restore the market to a healthy tone; but, in the meantime, purchases may be effected of the class of mines which may be designated progressive, on terms rendered highly favourable to the capitalist by the price being assimilated more closely than of late to their intrinsic value.

We regret to perceive the fall in the standard at Thursday's ticketing, which may be considered equal to 2*l.* from the sale of the preceding month, and which we are at a loss to account for.

In the Metal Market—Copper and Lead continue in good demand.—In Tin, a large business has been doing in refined; bar and block also brisk. The Foreign market is very firm.—Tin Plates have improved.—In Spelter, 180 tons have been sold: 100 tons to arrive, and 80 tons on the spot.

The London imports of the week comprise—from Adelaide, 3535 bags copper ore; St. Petersburg, 2712 bars iron; Carthagena, 400 pigs lead; Stettin, 75 tons and 4387 plates spelter, 2286 plates zinc; Seville, 1000 pigs, 55 tons, and 1650 quintals lead; Penang, 1457 slabs tin; Colombo, 180 casks, 57 boxes, 73 barrels plumbago; Antwerp, 18 casks spelter; Rouen, 50 casks copperas; Ghent, 20 barrels zinc.

At Liverpool—from Oporto, 61 boxes of antimony; Malaga, 4 barrels 4 cases nickel ore; Papudo, 84 tons copper regulus, 46 bars tin; Arica, 480 tons copper ore, 665 bars copper ore, 766 bags copper.

At Hull—from Hamburg, 6947 plates spelter, 14 casks of plumbago; Antwerp, 17 ingots zinc; Christiana, 499 cases nickel ore.

The arrivals at Swansea include—from Algiers, 170 tons of copper ore; from Cuba, 450 tons of copper ore; and from Jura de Cella, 80 tons of copper ore.

The price of gold in bars (standard) was 3*l.* 17s. 9d. per oz.; silver in bars (standard), 5s. 0¾d. per oz.; and new dollars, 4s. 11¼d. per oz. The advance in silver is in consequence of purchases for India.

Trehane has just sold 55 tons best silver-lead ore at 20*l.* 10s., and 40 tons inferior at 5*l.* 7s. 6d., the produce of one month.

The Callington Mines have 45 tons of lead ores for sampling on Monday.

The Tamar Silver-Lead Mines sampled on the 5th 75 tons of rich ore.

Bryntail Mine sold a parcel of lead ore, computed 50 tons, at 9*l.* 16s. 6d.

East Wheal George has sampled 17 tons 13¼ cwts. of copper ore.

At Holmbush, they sampled, on Tuesday, a parcel of lead ores, computed 80 tons.

At Nanteos, they sampled 45 tons of lead ore on the 8th inst., and expect a larger quantity next time.

The Tywarnhayle Mines next sampling is expected to be 600 tons of copper ore, and 20 tons of lead ore.

Rix Hill has sampled 7 tons 11¾ cwts. of tin.

At Wheal Buller meeting, on Tuesday, the accounts for May and June showed—Balance last account, 1338*l.* 11s. 11d.; ores sold (less dues), 4795*l.* 18s. 4d. =6134*l.* 10s. 3d.—Costs and merchants' bills, 1459*l.* 8s. 1d.; by dividend of 25*l.* per share, 3200*l.*: leaving balance in favour of adventurers, 1475*l.* 2s. 2d.

At North Roskear meeting, on Monday, the accounts for April and May showed—Balance last account, 1709*l.* 13s. 4d.; ores sold, 4091*l.* 17s. 8d. =5801*l.* 11s.—To costs and merchants' bills, 3271*l.* 0s. 8d.; by dividend of 7*l.* per share, 980*l.*: leaving balance in favour of adventurers, 1550*l.* 10s. 4d.

At the Alfred Consols meeting, on Tuesday, the accounts showed—Sales of copper ore in May and June (less 1-18th dues), 2754*l.* 0s. 10d.—By labour cost, April, 359*l.* 16s. 1d.; May, 437*l.* 12s. 7d.; merchants' bills, 364*l.* 19s. 2d.; doctor and club, 12*l.* 10s. 3d.; subsist, 40*l.*: leaving profit, 1539*l.* 2s. 9d.; to which add balance last account, 240*l.* 3s. 8d., and deduct dividend 6s. per share (1536*l.*), leaves in hand, 243*l.* 6s. 5d. The agent's report stated that Field's engine-shaft was 8 fms. 4 ft. under the 80, lode 6 ft. wide, favourable, The lode in the winze under the 80 east is worth from 40*l.* to 50*l.* per fm. The lode in the 80 fm. level is worth 50*l.* to 60*l.*, and in the 70, south of Wyld's shaft, 40*l.* to 50*l.* per fm. The tribute pitches looked well, and the water stamping mill will be at work in about three weeks.

At the West Polgooth Tin Mining Company's general meeting, yesterday (Sir George Edmund Hodgkinson in the chair), the report of the committee of management was read and adopted unanimously, and the number of shares was reduced from 12,500 to 6500. The balance-sheet, showing an amount in favour of the adventurers of 1052*l.*, was passed. The cost-book rules were agreed to, and the cost-book signed by the adventurers present, representing nearly 4000 shares. Sir G. E. Hodgkinson, Richard Hallett, jun., Cyrus Legg, Alexander Peter, and Charles Hancock, Esqrs., were unanimously appointed a committee of management. The cost-sheet for May was passed, and ordered to be paid. The report, which was considered very favourable, will be given in our next.

At the Tincroft Mine adjourned general meeting, on Thursday, G. B. Carr, Esq., in the chair, the committee appointed on the 30th April last read their report, which had been printed for circulation among the shareholders. It proved a lengthy document, containing numerous charges of mismanagement, deception, and misconduct on the part of the board in London and the agents in Cornwall, and concluded with "a hope that the shareholders will speedily release themselves and their property from the mismanagement, vexation, and deception to which they had for so long been subjected." After several hours' discussion, the resolution come to was "That the report of the committee of investigation, giving, in the opinion of this meeting, a most erroneous view of the state, prospects, and management of the mine, and also having entirely failed to substantiate the grave charges therein made against the directors, this meeting do now adjourn." A full report of the proceedings will be found in another column, and we reserve ourselves till next week for some observations we intend making on the subject.

The Cefn Gwyn shareholders assembled on Wednesday at the George and Vulture Tavern, and after a discussion of upwards of an hour separated, it having been discovered that the meeting had not been legally convened. The proper steps are being taken, and an advertisement and notice thereof will doubtless appear in the course of a few days, when it is to be hoped matters will be adjusted satisfactorily to all concerned, and the development of this valuable property be earnestly set about. It has local and other advantages likely to produce the best results.

At the Consolidated Mines meeting, on Wednesday, the accounts showed—Two months' ore money, 4805*l.* 16s. 4d.; ditto mundic, 196*l.* 14s. 6d.; ditto tin, 56*l.* 15s. 11d.=5059*l.* 6s. 9d.—Tutwork and wages for May, 1102*l.* 12s. 8d.; tribute balances ditto, 1013*l.* 5s.; tutwork and wages for June, 1237*l.* 6s. 6d.; merchants' bills, 2160*l.* 6s. 9d.: showing loss of 454*l.* 4s. 2d.; add balance from last account, 349*l.* 2s. 8d.: leaves now against the adventurers, 803*l.* 6s. 10d. The mine looks a little better, but, without an improvement, cannot meet her expenses.

At the West Ding Dong quarterly meeting, on Tuesday, the 1st inst., the accounts showed—Balance last account, 182*l.* 16s. 10d.; labour cost to the end April, 321*l.* 10s. 9d.; sundries, 25*l.* 2s. 6d.; merchants' bills, 115*l.* 3s. 4d. =644*l.* 13s. 5d.—By tin ore sold (less dues, 13*l.* 10s. 4d.), 256*l.* 16s. 10d.; calls, 245*l.* 10s.; sundries, 2*l.* 16s. 6d.: leaves balance to next account, 139*l.* 10s. 1d. A call of 7s. 6d. per share was made, and Mr. John Richards, jun., appointed joint purser with Mr. Batten. A winze sinking 6 fms. east from engine-shaft is down 8 fms. on a course of tin, worth from 10*l.* to 12*l.* per fm., and a second one, 11 fms. distance, is down 6 fms., value from 12*l.* to 15*l.* per fm. The lode in the 17 east is worth from 10*l.* to 12*l.* per fathom, and west of equal value. There have been sold 5 tons 4¾ cwts. of rich tin, realising 270*l.* 7s. 2d., and 4 tons more stamping. A considerable run of orey ground has been opened, that will work on tribute, and the prospects are looking inviting.

At Great Wheal Baddern meeting, on the 3d inst., the accounts showed—Balance last account, 1347*l.* 18s. 9d.; labour cost two months, 915*l.* 9s.; merchants' bills, 894*l.* 1s. 6d.; interest and office expenses, 52*l.* 16s. 5d.=3210*l.* 5s. 8d.—Call 1280*l.*; lead ore sold, 906*l.*; tin, 192*l.* 5s. 4d.; mundic, 37*l.* 10s. 2d.; materials, 25*l.* 9s. 10d.: leaves balance against adventurers, 769*l.* 0s. 4d. Add two months' labour cost, 960*l.* 1s.; merchants' bills, 283*l.* 12s. 4d.; interest, &c., 11*l.* 19s. 2d.=1924*l.* 12s. 10d.—By lead sale, less dues, 520*l.* 5s. 7d.: mundic and arsenic sold, 80*l.* 5s. 7d.; tin, 91*l.* 6s. 10d.; cash of old proprietors, 424*l.* 2s. 9d.: leaves balance to next account, 808*l.* 12s. 1d., against which is 60 tons of lead sold to Sims, Willyams, and Co., 2d July, 769*l.* 18s.

At the Penzance Consols meeting, on the 21st June, the accounts showed—Cost for eight months, 789*l.* 2s.—By balance last account, 40*l.* 8s. 8d.; tin sold, 495*l.* 3s.; sundries, 11*l.* 3s. 2d.: leaving balance against adventurers, 242*l.* 7s. 2d. As the present engine is not of sufficient power, and as in the event of setting a larger one to work there is every prospect of successful results, it was proposed to create 2048 new shares at 1*l.* each; and it was determined to recommend that an engine of sufficient power be provided—say, 20 to 24-in. cylinder—which will open a further quantity of ground, and the alteration of the present engine to a steam-stamps (calculated to effect a saving to the mine of 10*l.* per month at least), is estimated would cost 1200*l.* Reports from Capts. Hocking, Trembath, Noy, Michell, Carthew, and Harvey, all concur in the opinion that the indications warrant the expense of a larger engine, and that there is a promise of large and lasting returns.

At the Devon and Courtenay Consols meeting, on Wednesday, the accounts showed—Balance last account, 170*l.* 11s. 3d.; labour cost for May, 334*l.* 2s. 10d.; ditto for April, 402*l.* 1s. 3d.=906*l.* 15s. 4d.—By ore sold, 115*l.* 5s.; call, 624*l.*: leaving balance against the company, when all calls are paid, 167*l.* 10s. 4d. A call of 4s. per share was made, and a report read from the agent, Capt. Rickard, describing the progress of the operations, in which he stated that the leat, 600 fms. long, was nearly completed, that 20 tons of copper ore were ready for market, and that in another week they would be in a position to set tribute ground, when six men will raise from 35 to 40 tons of ore per month.

At Wheal Plenty meeting, last week, a call of 5*l.* per share was made.

At the West Phœnix meeting, held on Monday, the accounts showed—Paid purchase of ground east of engine-shaft, 150*l.*; labour cost, April, 189*l.* 19s. 11d.; ditto for May, 215*l.* 12s. 6d.; balance cost of engine, 205*l.* 12s. 6d.; sundries, 47*l.* 14s. 10d.=808*l.* 7s. 3d.—By balance last account, 81*l.* 4s. 4d.; calls, 492*l.*: leaving balance against the adventurers, 235*l.* 2s. 11d. A call of 1*l.* per share was made, and Mr. Noah Coward was appointed superintending agent at 2*l.* 18s. 4d. per month. The report from Capt. Collier stated that the opinion was every day strengthened that a rich course of tin would be found at the intersection of the lode, and beneath the tin rich copper. The same lode in the Old Phœnix is turning out great riches.

At the Trethevy meeting, on Tuesday, the accounts showed—Labour cost, April, 144*l.* 6s. 4d.; ditto May, 191*l.* 6s. 2d.; Messrs. Nicholls and Co., for iron work, 100*l.*=435*l.* 12s. 6d.—By balance from last account, 2*l.* 5s. 10d.; calls, 363*l.* 17s. 3d.: leaving balance against the adventurers, 69*l.* 9s. 2d. A call of 1*l.* per share was made, and Mr. Noah Coward was appointed superintending agent, at a salary of 2*l.* 18s. 4d. per month. The meeting was adjourned to the 28th inst., to forfeit all shares then in arrear of call, and it was resolved that all surface work be stopped, and the greatest economy used. The reports stated there was every appearance of not being far from the south lode, and that the lode in the 40 fm. level gave promise of becoming rich.

At Wheal John meeting, on the 9th inst., the accounts showed—Balance end Feb., 40*l.* 11s. 10d.; March, April, and May costs, 73*l.* 10s. 5d.;

merchants' bills, 71*l.* 18s. 11d.=186*l.* 1s. 2d.—By call of 10s. per share, 75*l.*: leaves balance of 111*l.* 1s. 2d. A call of 1*l.* per share was made.

At Great Sheba meeting, on Monday, the accounts were examined and passed, showing—Labour cost for March, 234*l.* 19s. 9d; April, 204*l.* 4s. 8d.; May, 200*l.* 5s. 11d. = 639*l.* 10s. 4d.—By balance last account, 91*l.* 1s. 5d.; calls, 393*l.*: leaving balance against the mine, 155*l.* 8s. 11d. A call of 1*l.* per share was made, and Mr. Noah Coward was appointed superintendent, at a salary of 2*l.* 18s. 4d. per month. It was resolved to put the north shaft down 30 fms., by which time the wheel would be completed, when the 30 fm. level could be cut.

At Wheal Gill meeting, on Wednesday, the accounts were examined and passed, showing—Calls, 815*l.* 10s.—Balance last account, 151*l.* 3s. 2d.; labour cost, March, 113*l.* 5s. 11d.; ditto April, 58*l.* 16s. 1d.; ditto May, 129*l.* 17s.: balance cost of engine, 265*l.* 1s. 6d.; sundries, 28*l.*: leaving balance in favour of the mine, 69*l.* 6s. 4d. A call of 1*l.* per share was made, and Mr. Noah Coward was appointed superintendent, at a salary of 2*l.* 18s. 4d. per month. The engine is expected on the mine in about a fortnight, and there appears to be no doubt in the minds of purser and agents that when all the work is complete, and the water in fork, which will be in about four or five months, the results will be most favourable.

At the Towan Mine meeting, on the 30th June, the accounts from Aug., 1850, to the end of May, 1851, showed the costs and merchants' bills to be 132*l.* 5s. 4d.; to meet which, and for the future working of the mine, a call of 10s. per share was made.

Among our mining reports will be found one from the Kenmare Mines, which we are happy to find shows that no exertions are being spared by Mr. William Thomas to fully develope the property, and bring it into a profitable state of working. It has been suggested, we believe, that in all the contract works subsist money shall be advanced fortnightly, and at the expiration of each month measure up the work, and finally settle a fortnight after, thus keeping two weeks' wages in hand, as a security for proper conduct and fulfilment of all contracts. It is to be regretted that considerable delay has taken place in forwarding the castings required from Hayle, which should have been shipped to Bristol, from whence there are two steamers weekly to Cork, instead of sending them to Plymouth. Until these are obtained, it will be impossible to sink Croker's shaft and open deeper levels, and may operate as a serious drawback in the returns for months. The necessary arrangements are being zealously made for obtaining the requisite supplies of materials of superior quality, and on the lowest terms, and ascertaining the best and most economical mode of carriage, freight, &c. The zeal and perseverance of Mr. Croker has been justly commended; and it is evident Mr. W. Thomas must have a high opinion of the adventure, and will, to the utmost of his power, promote its interests, he having undertaken to superintend the workings on a per centage only of the returns, without any fixed remuneration. It will be seen from the report that eight bargains have been set, which are now being prosecuted, some of the lodes being highly promising, and we trust in a few months to be able to record the gratifying information that the mines are yielding good profit.

At Treleigh Consols, the 90, west of Garden's, has considerably improved, being worth 35*l.* per fm.; the winze below the level 14*l.* per fm.

At the Keswick Mines, they have cut a pipe of ore in a winze in the adit level at Brandley, which is in places 8 in. wide, of solid ore. They have also cut the same run of ore in the 20 fathom level north, at present between 2 and 3 inches wide.

At Lydford Consols, the Wheal Mary lode is large, and contains good stones of lead in the adit. The prospects are altogether encouraging.

Caradon Wood Lead Mine is highly thought of on the Stock Exchange, and a good deal of business has been done at 2⅜.

Boringdon Park is looking well. The tribute pitch lately set in the adit is turning out satisfactorily. Assays of the ore dressed have been obtained, and make it worth between 20*l.* and 30*l.* per ton.

An improvement is reported in East Wheal Leisure. The 10 fm. level west, on Taylor's lode, will now yield 4 tons of ore per fm., lode 5 ft. wide. Other parts of the mine much the same as last reported.

At the West Beam Mine (St. Austell), we understand they have a considerable improvement in the lode, which has created a rise in the price of shares, from 1*l.* 10s. to 2*l.*

A great and decided improvement has taken place in the Caradon Vale Mine, near Liskeard. The lode in the 32 fathom level is now producing a mixture of rich grey, yellow, and black copper ore, saving work.

We regret to learn that the levels generally at Wheal Mary (Redruth) continue poor, so that the shareholders are becoming averse to the further making of calls, and contemplate offering a considerable portion of the mine for sale. We would suggest to them, after having incurred so large an outlay, and prior to taking any sudden step, the calling in of two or three unconcerned and impartial agents to inspect and report their opinion, and advise.

At Tywardreath Mine, the north iron shaft is now down about 2 feet in firm shelf. A floor of tin ground has been passed through 2½ ft. thick, of tolerably good work.

At Court Grange Mine, 22 tons of ore were offered for sale on the 16th from Pen-y-Cefn, and 4 tons from Llettynhen Mines. The latter are improving, and adding to the resources of the company. The month's working will give a good profit.

At Allt-y-Crib Mine the sales of ore will be increased from 30 to 40 tons, the ore ground having materially improved. They expect the present month's working will yield 480*l.* worth of ore, while the cost and royalty may be put down at 260*l.*, leaving upwards of 200*l.* profit.

At Cae-gynon Mine the ore bargains go on improving. They have been short of water, which has led them to go to the Rhudol with the new watercourse. The returns will exceed the monthly cost by about 100*l.*

At Bwlch Consols, the ore bargains continue to improve. The average profits throughout 1851 have been 150*l.* per month, on a return of 45 tons. They are now enabled to return 55 to 60 tons monthly, and the monthly profits will not, it is believed, for the future be far short of 300*l.*

At Bronfloyd, the lode continues to yield a fair amount of ore both to the eastward and westward of the adit cross-cut, and the shaft sinking under the adit is passing through large bars of ore. They expect to make upwards of 100*l.* on this month's working, although the length of ore ground yet opened, in comparison with the whole, is short, being scarcely a tenth part of it.

At Daren, the stopes continue to yield a fair quantity of lead and copper ore, and the sales of these metals continue to exceed the working cost; but having a steam-engine in course of erection, the profits cannot yet be divided.

At Dyfngwm, the ore bargains are generally looking well.

At Rhoswydol, there is a further improvement in Davies' level. Besides 2 ft. of a strong mixture, there is 18 in. of nearly solid lead, in all 3 feet 6 inches in width; in fact (the agent writes) it improves more or less every day. This course of ore is in the next level above Prosser's, which is the deepest. Both levels are driven eastward.

From the Milwr Mines, we learn that, since last week, the drop or bottom lift has been sunk 6½ fms. deeper, and is now resting, we suppose, on a sollar at the 204 yards, or 102 fm. level; and is expected it to be in fork by to-morrow morning, and they hope to be able to get through the deepest workings on Saturday next. The whim-shaft has been so far repaired as to enable the drawing from the 70, 80, 90, and 102 fm. levels in three or four days from this time; soon after which the dried orey ground will be set to work. The old lifts in the shaft of three 19-in. pumps have troubled them a great deal in getting the lift down; but now this difficulty is at an end, as by to-morrow they will be so far drained as to enable them to remove the whole without difficulty, and to put the new lift in the place of one of them. The new vein cut in the 50 fm. level, south from Wepre vein, is orey, and promising to be equally good as the Wepre vein has been. The other parts of the mine are moving much as usual.

We understand that proceedings have been commenced in Chancery against the present company working Wheal Neptune, in Cornwall; the affair is likely to assume a matter of consequence, as it regards integrity between landlords and adventurers. It is said the present company hold possession of a portion of the sett under a sort of "lynch law," and that their title is very questionable; and, moreover, they have taken possession of some land, and built a portion of their engine and boiler houses on the property, without any grant or title to it.

During the week shares have changed hands in Alfred Consols, Bedford, South Caradon, Spearne Consols, Trehane, Mary Ann, Trelawny, Wicklow, and one or two other dividend-paying mines; also in Caradon Vale, East Buller, Great Sheba, Kirkcudbrighshire, Merllyn, Trethevy, Tywardreath, West Downs, Wheal Crebor, Lemon, Wheal Sydney, East Wheal Russell, and Boringdon Park.

In Foreign Mines the transfers have been few—in Cobre, Santiago, St. John del Rey, United Mexican, Worthing, and Australian.

At the Cobre meeting, on Tuesday, the directors' report was highly satisfactory as to the progress of the undertaking during the past year, and highly encouraging for the future. It appears there was a falling off in the quantity of ore raised in 1850 as compared with 1849; but this being compensated for by increase in the per centage, the actual profit remains nearly the same. The produce of the mines for the first five months of the present year has exceeded that of the corresponding period of 1849 by 508 tons; and, though there has been for a week or two a slight falling off, there is every reason to hope that the general produce will equal the last. A dividend of 4*l.* was declared, payable on 24th inst.

Despatches have been received from the Alten Mines to the 4th inst. The estimated produce for June was 150 tons of ore, which it was calculated would produce 8¼ tons of pure copper. At Raipas the ores have been of a better per centage. At the United Mines a new lode has been discovered, which is looking promising for the tributers. The Old Mine is looking favourable. The surface operations at Michell's are improving. At Mancur's the tributers are collecting some parcels of good ore.

From Linares the advices are to the 5th inst. The engine-shaft of San Thomas will be completed to the 55 this month. West of Wilson's, at that level, the lode turns out 3 tons of lead per fathom; eastward is a fine course of ore, but the end will not be driven until a piece of ground now stoping is taken down. The tributers are doing well, 16 pitches working at an average of 29s. per ton, dressing included. The raisings for June are 142 tons, and the current month is expected to be 160. Ore weighed in, July 5, 31 tons 2 cwts.: total in stock, 1016 tons 12 cwts. Pig-lead smelted, July 5, 23 tons 0 cwt. 9 lbs.: total in stock, 130 tons.

From St. John del Rey the advices received are to the 28th May, the average produce for April being 3·81 oits. per ton; stamps working, 118·53 heads, being rather under that of the preceding month, yet realising 25,655 oits. at 7s. 8d.=9834*l.* 8s. 4d. The costs were 4819*l.* 5s. 11d., leaving balance of profit, 5015*l.* 2s. 5d. In consequence of the high rate of exchange, the two months' produce, 53,212 oits. of gold, was transmitted to Rio, and there disposed of, realising 20,841*l.* 7s. 4d., which amount has been received in bills. The progress making at the mines is of a highly satisfactory nature. The report will be found in another column.

From the Imperial Brazilian the accounts are a shade better. A full report will be found in another column. Great reliance is placed on meeting with good returns of gold on reaching a deeper level at Gibson's—viz., a 34; and, looking at it in a miner-like view, we should say the policy of sinking to that depth cannot be questioned; in fact, the reports all united in one opinion as to this desirable object being pursued with all due vigour. It is down 4 fathoms, showing a little gold, and they have ample power to sink it the remaining 6 fms., together with every requisite and material required for the purpose. The Joinville stamps, with 30 heads, is now steadily at work. At Bananal, the produce from Thomas's vein gives several boxes of work to the stamps and washing-house, though not rich. The rise in the back of the 24, on the Big Pump vein, being holed, the stopes will work to greater advantage. Gold report, from 27th April to 27th May, at Gongo, mks. 6 10 9 0; and Bananal, mks. 10 5 9 0: total for the month, 17 3 18 0, making respectively from the 1st Jan.,—from Gongo, mks. 37 5 18 0; and Bananal, mks. 41 10.

From the National Brazilian, the accounts continue to be on the improving order. Total produce for the month of May, mks. 36 7 0 69, being a further increase of mks. 4 7 on the preceding one. The stopes at Hamilton's are represented as never looking more kindly, and a greater number of hands are eagerly desired and sought for to pursue the drivings in various parts. Prospects generally are flattering, and the next advices anxiously waited for.

Advices received by the Australian Mining Company state that the 20 fm. level, south of Anstey's shaft, was driven 10½ fms. without cutting the lode, which it should have done had not the underlay changed. Masterman's shaft was down 4 to 5 ft. below the 10 fm. level, the lode remaining unbroken in the western side. Wootton's shaft is down 32 fms. 4 ft. 6 in., in ground somewhat harder than in the past month. The lode in the 4 east was promising, producing some work for the stamps. In the 45 the lode was 4 ft. wide, containing good stones of ore in a beautiful gossan. There had been sent to port 1007 tons of ore, and 1000 tons more at surface: total, 2007 tons raised from the mine.

The Worthing Company have received advices to the 7th of March, which will be found in another column. The engine-house continues to proceed satisfactorily, but we cannot expect to hear anything particularly new, or form any well grounded opinion, until the engine gets to work, and the lodes are seen below the water, at a deeper level. A box of specimens have arrived, which lie at the office for inspection. A call of 1*l.* per share has been made by the directors.

The committee of the North British Australasian Company have furnished a statement of the affairs of their company to 30th of June, 1850, which shows the assets to consist of—Land in New South Wales, estimated at 10s. per acre (the minimum Government price being 20s.), 8595*l.*; live stock, wool, tallow, implements, machinery, &c., 35,626*l.* 4s. 7d.; mining property—Kaw-aw (expended on the mine and works, less returns), 43,073*l.* 2s. 8d.; smelting works (expended, less returns), 3157*l.* 1s. 8d.; share of Bon-Accord mineral property (ditto), 2875*l.* 16s. 11d.; debts due to the company and miscellaneous, 9516*l.* 1s. 6d.=108,843*l.* 7s. 4d.—The liabilities are, in Britain, 35,596*l.* 1s. 8d.; in Australia, 7826*l.* 8s. 9d.=43,022*l.* 10s. 5d.: leaving the stock account, 59,420*l.* 16s. 11d. It appears the sea had broken into the Kaw-aw Mine and stopped the works, through the operations of Messrs. Whitaker and Heale, on the shore and at their mine. Mr. Taylor, the company's manager, had, therefore, purchased the entire grant of shore, wharf, mine, &c., with all materials and machinery thereon; the sea was excluded, the miners at work again, and the workings were expected to be, in consequence of this arrangement, more successfully conducted. Operations for roasting the copper ore in piles of 150 tons each in the open air had commenced; a large quantity of ore was in hand on the mine, and the hope is expressed that such works would shortly be in regular and successful operation. Mr. Taylor expresses his opinion that the skill and science of Mr. Berger, who arrived in December last to superintend smelting operations, would give a vastly improved character to the concern. Within the last two months wool and regulus to a considerable amount has arrived in this country, which brought good prices, and by the last despatches it was stated that 79 tons more copper regulus had been shipped for England, containing 25 per cent. of copper, being richer than previous shipments.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Bates's West Hartley 12 9—Chester Main 12 6—Holywell 13 6—Redheugh Main 11—Tanfield Moor 12 9—West Wylam 13—Wall's-End Acoru Close 12 6—Tees 14 3—Derwentwater Hartley 13 6—Hoyland's Steam 13 3—Nixon's Merthyr and Cardiff 21.—Ships at market, 83; sold, 64.

WEDNESDAY.—Howard's West Hartley Netherton 13 6—Hartlepool West Hartley 13 6—West Wylam 13—Wylam 13—Wall's-End Hetton 14 6—Lambton 14 3—Russell's Hetton 14—Caradoc 14—South Hartlepool 13 6—South Kelloe 13 3—Adelaide Tees 13 3—Maclean's Tees 12 6—Derwentwater Hartley 13 6—Nixon's Merthyr and Cardiff 21.—Ships at market, 36; sold 24.

FRIDAY.—Buddle's West Hartley 13 6—Carr's Hartley 13 6—Holywell 13 6—Howard's West Hartley Netherton 13 6—Hartlepool West Hartley 13 6—Ravensworth West Hartley 13 6—Redheugh Main 11 6—Tanfield Moor Bute's 12 6—Townley 12 3—Wylam 13—Wall's-End Harton 13 3—Hedley 13—Hilda 12 9—Northumberland 12 6—Riddell 13—Eden Main 13 6—Belmont 13 3—Braddyll 14 3—Hetton 14 6—Haswell 14 9—Kepier Grange 13 9—Lambton 14 3—Pensher 13—Russell's Hetton 14 3—Richmund 13 6—Stewart's 14 6—Caradoc 14—Hartlepool 14 6—Heugh Hall 13 3—Kelloe 14 3—South Hartlepool 14—Thornley 13 3—Whitworth 12 3—Adelaide Tees 13 3—Backhouse 12 9—Seymour Tees 13—Tees 14 6—West Cornforth 12 9—Cowpen Hartley 13 6—Gwaen Cae Gurwen 24—Hartley 13 6.—Ships at market, 100; sold, 78.

Delivery of coals, &c., in the port of London during the month of June:—

	Ships	Tons
Newcastle	303	94,037
Sunderland	123	33,947
Seaham	118	29,132
Stockton, Middlesbro', &c.	244	60,315
Blyth	26	5,808
Scotch	6	1,531
Welsh	27	5,810
Yorkshire, &c.	6	542
Small coal	3	656
Culm	—	—
Cinders	4	217
Total imported in June, 1851	860	231,995
Imported in June, 1850		295,686

Inland coals brought by canal, in the month of May, 1851, upon which the City's and other dues were received ..... Tons 2015¾

Inland coals brought by railway, the City's and other dues upon which were paid into the Chamber in the month of June, 1851 ..... 16798¾

Comparative Statement of 1850 and 1851.

Imported from January 1 to June 30, 1850	Ships	5929	1,647,786 tons.
Imported from January 1 to June 30, 1851	„	5549	1,527,527 „
Decrease in the present year	„	380	120,259 „

LEAD ORES.

BIDDINGS FOR THE PARCEL OF BRINTAIL LEAD ORE, COMPUTED TO BE 50 TONS.

Sold at Aberystwith, on the 15th July.

Bidders.	*Amounts Bid.*
Newton, Keates, and Co. (purchasers)	£9 16 6
J. P. Eyton	9 15 6
Locke, Blackett, and Co.	8 0 0
Pontifex and Wood	6 19 6
Sims, Williams, Nevill, and Co.	9 15 6
Tamar Smelting Company	2 5 0
Walker, Parker, and Co.	9 5 0

Sold at the Mine.

Mines.	*Tons.*	*Price p. Ton.*	*Purchasers.*
Allt-y-Crib	30	£11 7 0	Walker, Parker, & Co.
East Wheal Rose	80	13 16 0	Michell & Son.
ditto	60	13 15 0	Newton, Keates, & Co.
ditto	18	12 0 0	ditto
Tamar	75	18 3 6	Tamar Company.

BLACK TIN

Mine.	*Tons c. qr. lbs.*	*Price p. Ton.*	*Purchasers.*
Millpool	1 13 1 12	£42 15 0	Bolitho & Sons.
Mineral Court	3 6 3 9	55 0 0	Calenick Company.
ditto	0 6 3 6	31 0 0	ditto
ditto	0 3 2 24	52 15 0	ditto
ditto	0 1 2 26	47 5 0	ditto
ditto	0 2 1 24	45 7 6	ditto

COPPER ORES.

Sampled June 25, and Sold at Swansea, July 15, 1851.

Mines.	Tons.	Prod.	Price.	Mines.	Tons.	Prod.	Price.
Berehaven	126	9½	£ 7 1 6	Kaw-aw	86	15¾	£11 8 0
ditto	125	10	7 9 0	ditto	52	15½	11 12 0
ditto	121	9¾	6 19 6	ditto	62	19¾	14 5 0
ditto	103	10½	7 7 6	Tungkillo	71	19½	14 8 6
ditto	83	11	8 2 6	ditto	5	22½	17 13 6
ditto	78	9¾	7 5 6	ditto	2	14¾	11 0 0
ditto	20	10½	7 9 0	Creetown	27	6¾	5 1 0
Cobre	100	15¾	11 6 0	ditto	12	11½	8 5 0
ditto	70	16½	11 13 0	ditto	8	14¾	11 1 0
ditto	38	24	17 18 0	Lackamore	44	8	5 12 0
ditto	9	19½	14 0 0	Molong	20	20½	15 0 6
ditto	25	18¾	13 19 0	Port Lincoln	10	20¾	15 14 0

TOTAL PRODUCE.

Berehaven	655	£4817	2 6	Creetown	47	£ 323	15 0
Cobre	242	3100	9 0	Lackamore	44	246	8 0
Kaw-aw	170	2125	2 0	Molong	20	300	10 0
Tungkillo	78	1134	11 0	Port Lincoln	10	157	0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
English Copper Company	126	£ 873 10 4
Freeman and Co.	102	840 18 6
Pascoe Grenfell and Sons	217	2148 9 0
Sims, Willyams, & Co.	76	1112 11 0
Vivian and Sons	275	2852 11 0
Williams, Foster, and Co.	219	2229 12 4
Mines Royal	68	506 2 4
Schneider and Co.	38	476 4 0
Low's Patent Copper Company	126	891 9 0
F. Bankart	20	300 10 0
Total	1267	£12,204 17 6

Copper ores for sale July 29th.—Cobre 106, 90, 80, 68, 60, 54, 46, 6, 92, 84, 66, 29—Berehaven 135, 133, 118, 78—Copiapo 84, 82, 81, 80, 79—Knockmahon 80, 75, 71, 69, 46, 45—Kaw-aw 50, 48, 7, 47, 3, 29—Kapunda 48, 39, 43, 42—Burra Burra 41, 35—Gloucester Slag 37—Ballynoe 18—Cronebane 3—Tigrony 3—African 1.—Total, 2531 tons.

AVERAGES.

	Produce.	Price.	Standard.
British	9 13-16	£ 7 4 0	£96 8 6
Foreign	17 11-16	13 2 0	86 14 0
Sale	13	£ 9 12 6	£91 0 0

Totals—British 747; Foreign, 520 = 1267 tons (21 cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	8¼	£ 5 19 0	£99 0 0
Foreign	19¾	14 15 0	85 15 0
Sale	14¾	£10 11 0	£89 0 0

Totals—British, 611; Foreign, 791 = 1402 tons (21 cwts.)

COPPER ORES.

Sampled July 2, and Sold at the Royal Hotel, Truro, July 17.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Gt. Cons.	108	£5 14 6	West Caradon	78	£6 8 0
Wh. Josiah			ditto	58	7 13 6
ditto	105	4 18 6	ditto	52	8 10 0
ditto	98	7 11 0	ditto	38	3 15 6
ditto	95	4 8 6	Wheal Friendship	105	6 4 6
ditto	94	8 7 6	ditto	75	6 4 6
ditto	91	5 0 6	ditto	47	2 13 6
ditto	89	7 7 0	Fowey Consols	80	8 0 6
ditto	88	5 4 6	ditto	68	5 6 6
ditto	85	6 9 6	ditto	57	1 8 6
ditto	83	6 2 0	Bedford United	71	7 11 6
ditto	82	6 7 6	ditto	70	5 10 6
ditto	57	7 14 6	Poldice	58	4 10 6
Wh. Fanny	84	4 12 6	ditto	42	4 16 0
ditto	78	4 10 6	Callington	100	5 6 6
ditto	60	4 18 6	Wheal Busy	35	3 1 0
ditto	32	2 16 6	ditto	16	3 2 6
Wh. Maria	80	4 18 6	Tamar Co.'s Slag	35	4 9 0
ditto	49	9 15 0	Wheal Crebor	34	3 18 0
Wh. Anna Maria	107	5 7 6	Wheal Maiden	20	5 10 6
ditto	44	5 14 6	Wheal Jewel	11	6 0 0
West Caradon	83	6 10 0			

TOTAL PRODUCE.

Devon Gt. Cons.	1609	£ 9500	1 0	Bedford United	141	£ 924	11 6
Wheal Josiah				Poldice	100	464	1 0
Wheal Maria				Callington	100	532	10 0
Wheal Fanny				Wheal Busy	51	156	15 0
Wh. Anna Maria				Tamar Slag	35	155	15 0
West Caradon	309	2069	6 0	Wheal Crebor	34	132	12 0
Wheal Friendship	227	1246	4 6	Wheal Maiden	20	110	10 0
Fowey Consols	205	1085	6 6	Wheal Jewel	11	66	0 0

Average Standard ..... £95 19 0 | Average Produce 8¼
Average Price per ton £5 16 0
Quantity of Ore ..... 2842 tons | Quantity of Fine Copper, 252 tons 15 cwts.
Amount of Money £16,443 12 6

LAST SALE.—Average Standard ..... £99 14 0.—Average Produce 8¾
Standard of corresponding sale last month, 94*l.* 17s.—Produce, 9¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	158	£846 11 0
Vivian and Sons	267	1692 3 9
Freeman and Co.	370	2017 2 3
Grenfell and Sons	248	1249 5 3
Sims, Willyams, and Co.	536	2944 6 3
Williams, Foster, and Co.	873	5591 9 6
Schneider and Co.	208	1052 15 6
Mason and Elkington	182	1049 19 0
Total tons	2842	£16,443 12 6

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Parcels.—Perran St. George 700—United Mines 488—Consolidated Mines 459—Treviskey 383—Par Consols 286—South Caradon 203—South Tolgus 155—Trethellan 70—Treleigh Consols 70—Wheal Ellen 68—Wheal Mary (Redruth) 40—Wheal Clifford 34—Wheal Vyvyan 30.—Total, 2986 tons.

Copper ores for sale on Thursday week, at Tyack's Hotel, Camborne.—Mines and Parcels.—Tincroft 641—Wheal Seton 601—Wheal Basset 526—North Pool 461—East Wheal Crofty 363—East Pool 353—Camborne Vean 337—Condurrow 263—South Wheal Frances 225—Fowey Consols 161—North Roskear 118—Dolcoath 66—Pendarves Consols 30—Oate's Ore 27.—Total, 4172 tons.

COMPARATIVE AVERAGES OF THE WEEKLY SALES OF COPPER ORES FOR NINE YEARS—THIRD SALE FOR JULY, 1851.

Years.	*Tons.*	*Produce.*	*Amount.*	*Standard.*	*Cop. Ore.*	*Price Cake Cop.*
1842	3955	7¼	£19,924 11 0	£107 3	£69 6	£89
1843	2953	8¼	16,597 5 0	103 16	67 4	80
1844	2471	7¼	12,978 8 6	103 10	67 19	84
1845	3271	9	21,308 3 6	102 7	71 19	88½ to 91½
1846	4257	7¼	20,633 15 6	96 3	61 10	93 to 96
1847	3265	8¼	20,326 4 6	103 8	71 14	98 to 101
1848	2710	9¼	13,309 12 0	78 8	50 5	79½ to 82½
1849	2115	10	13,662 17 0	91 11	64 5	79½
1850	2640	8¼	14,644 6 0	96 7	64 9	84

The *Angelina Rees*, from Hammerfest, anchored in the Thames on Wednesday morning, bringing with her 130 tons of copper belonging to the Alten Mining Association. The copper, which is "best selected," is of a superior description, and has already found a purchaser at more than the average rate.

BAL MASQUE, VAUXHALL, THURSDAY, JULY 24th, on the same Scale of Magnificence that has hitherto commanded such Immense Success. Arban's Splendid Orchestra and Four Extra Bands; Sixteen Masters of Ceremonies. The Great Ball Room will be thrown open, and the Illuminations will be Unusually Brilliant. Gentlemen's Tickets, 10s.; Ladies' ditto, 5s.; Doors open at Ten. Mr. J. Nathan, Castle-street, Leicester-square, is the appointed Costumier. On MONDAY and TUESDAY, JULY 21 and 22, GRAND GALAS and FETES in AID of the FUNDS of the LICENSED VICTUALLERS' SCHOOL. BALLOON ASCENT by MR. H. BELL. Doors open at Six. Admission 2s. 6d. On WEDNESDAY, FRIDAY, and SATURDAY, SPLENDID GALAS. Doors open at Eight. On SATURDAY at Seven. Admission 2s. 6d. Among the Manifold Attractions of the Royal Gardens are the following:—The Four Greatest Equestrians in the World—Madame Lejars, Mdlle. Palmyra Annato, Mdlle. Pauline Cuzent, and Young Hernandez. Vocal and Instrumental Concert. Arban's Inimitable Orchestra and Sax Horn Band. Foucault's Marvellous Fire and Water Sports. Madame Antonio's Daring Rope Ascent. The Algerine Family. Stupendous Picture. Gorgeous Fireworks, and Enchanting Illuminations. The Gardens are open every Evening, including Saturday. 4s

NOTICES TO CORRESPONDENTS.

"W. M." (Lincoln).—Mr. Braithwaite Poole's Statistics of British Commerce is being published in parts—two of which are ready, and can be had of Messrs. Smith and Son, Strand, or other booksellers: when the work is complete, a notice will appear in our Journal.

INCLINES ON CANALS.—A correspondent states (for the information of "C. C. C.," in last week's Journal) that Mr. Leslie's incline on the Forth and Clyde Canal is the most successful, and is approved.

"A Shareholder" (Cheapside).—We do not think the publication of the letter desirable—a meeting will shortly be held, when the subject must be brought forward, and explanations entered into.

F. Daines (Liverpool).—The aborigines, both in North and South America, were acquainted with copper long before they knew of the use of iron. It is stated, when the Spaniards first entered the province of Tuscan, they found the Indians in possession of an abundance of copper axes, which in their greediness they mistook for gold, and were much mortified on discovering their mistake. Some arrow points were discovered in Massachusetts in 1831, which were supposed to have been left there by the Northmen, who are said to have settled in New England in the thirteenth century. In the copper region of Lake Superior a vein, belonging to the Minesota Company, bears traces of having been worked for upwards of two miles. In a mine of this particular company, beneath 15 feet of accumulated soil, and beneath trees of not less than 400 years old, a mass of pure copper was found, weighing 11,537 lbs.: traces of fire were seen around it. Silver was likewise known to have been used by them, and the art of plating was common. Iron was introduced by the European conquerors.

TINCROFT MINING COMPANY.—The letters of "A Shareholder" and "G. B." shall appear in our next, when we shall also make some comments.

"W. L." should apply to a mine broker: we never advise in the sale or purchase of shares.

"Agenor" (Jerusalem Coffee-house).—We are ever urging our correspondents to avoid personality, and, as far as possible, we divest their letters of objectionable personal reference previous to publication. We do not know what communication our correspondent particularly refers to, but the writer named can only blame himself for the "rappings" he has received,—he having first provoked them.

"A Miner" (Liverpool).—Professor Austed's course of lectures on Practical Geology appeared in the *Mining Journal* from April 20 to June 15, 1850.

"F. G." (Cambuslang).—Our statement of Accidents in Mines does not comprise all that occur; we endeavour to obtain the most correct information from authentic sources. We are always glad to avail ourselves of any communications on which we can rely; but it is necessary they should be forwarded as early as possible.

FORESTALLING IN MINE SETTS.—A circumstance has come to our knowledge with reference to some rich and promising mineral ground in Ireland, which is much to be regretted, as tending to create that want of confidence so inimical to successful mining. The discovery having been made known, a party from London applied for a grant of the sett, on behalf of a highly respectable proprietary, as he affirmed; and after some preliminary negotiations and verbal agreement as to terms, it was discovered, on an inquiry, that no such company existed, and that the party was an adventurer, endeavouring to obtain the sett on speculation, and, of course, pocket a thumping premium. We are glad to say, the land proprietor scorned the means adopted, and broke off all further negotiation, much to the chagrin of the representative of a non-existing company.

"J. E. K." (Loughborough).—Under such favourable circumstances, the prospects appear to be unusually promising, and would certainly justify reasonable speculation.

A paper on the Alum Trade and Works of England appeared in No. 738 of our Journal.

"One Interested" (Bristol).—We decline publishing the communication—our correspondent is at perfect liberty to take any steps, or to pursue whatever course, he may be advised, "under the circumstances."

"A Suffering Adventurer" (Tavistock).—The business of a mine on the Cost-book System is carried on quite differently to that of an ordinary trading firm; regular calls are made, as money is wanted for the purposes of the partnership, which are paid down, and the directors have only authority to manage the concern with the money so supplied, but not to pledge the credit of individual shareholders. The purser of a cost-book mine orders every cart-load of timber, or other materials, which he has not funds in hand to pay for, at his own risk, and the merchant supplies it on his credit only. This has been decided in numerous cases, and is a common sense view of the justice of the matter.

"S." (Bristol).—The address of the Devon Haytor Granite Company is 59, King William-street, City.

"Wernerius" (Sudbury).—Minerals have been formed artificially, as well as imitations of precious stones, agreeing in chemical structure with natural ones. M. Senarmont produced them by the humid way: he inclosed in a strong glass tube, for instance, sulphate of iron and carbonate of soda in solution: the tube being carefully sealed, was deposited in a gun barrel half full of water, and this being also closed, was exposed to a certain temperature—double decomposition ensued on the salts mixing, but, by the heat, the carbonate of iron and sulphate of soda produced are re-dissolved and deposited in crystals, not altered by exposure to the air. By the same means carbonate of magnesia and manganese, and other mineral crystals may be formed.

"F. H." (Norwich).—Received.

"Enquirer"—We believe we shall be enabled shortly to publish Mr. Kennard's paper on the Substitution of Cast Iron for Wooden Sleepers. Mr. Barlow's paper, on the same subject, has appeared in the "Transactions of the Institution of Civil Engineers:" an abstract was given in our Journal at the time of its reading.

"A. M." (Leith).—We should be glad to receive the paper: we are anxious to report the particulars of all inventions or improvements connected with metals and machinery.

"T. W." (Redruth).—Our "Glossary of English and Foreign Mining and Smelting Terms" (2s.); and the "Principles and Practice of the Cost-book System" (6d.), can be procured through any bookseller or newsman in town or country.

"B." (Cork).—Mr. Evan Hopkins's work on Terrestial Magnetism is out of print, but a new edition is preparing for publication.

We were unable to get the engraving prepared in time to allow the paper on Zinc Manufactures to appear in our present Journal.

Mr. Hopkins has returned to London, and will remain at his office a few days, during which he will be happy to give advice as usual.

"Œvarius," on Copper Sheathing, and "A Newcastle Collier," on Accidents in Mines, shall appear in our next Journal.

We have several letters in type respecting the Mining Exchange, which a pressure of matter has compelled us to hold over.

The Cost-Book System.

Having repeated applications for particulars respecting the Cost-book System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the *Mining Journal*. Copies can be procured through any bookseller or newsman, or at our office, price 6d.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

*** It is particularly requested that all communications may be addressed—

TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JULY 19, 1851.

THE MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

In several Numbers of the MINING JOURNAL, in July and August last, we inserted a report by Dr. ANDREW FYFE, the Professor of Chemistry in King's College University, Aberdeen, on the nature, qualities, and commercial value of WHITE's water and resin gas, termed by the patentee "hydro-carbon gas," a report by no means bearing out the assertions promulgated as to the purity, high-illuminating powers, or economy of the gas, as given out by the patentee, and going, indeed, so far as to state that Mr. WHITE's gas was not water gas at all, but extracted from resin and fat, the latter in the largest proportion. Another interesting and important paper on the same subject has just been published; it is a report of a series of experiments made by Dr. FRANKLAND, F.C.S., Professor of Chemistry in Owen's College, Manchester, over a period of six days; the result being, that while the statements made by Mr. WHITE as to the chemical character of his gas are by no means, under many circumstances, supported, the conclusion is arrived at that the hydro-carbon gas is superior in illuminating power to Manchester coal gas, more economical, and giving off no deleterious vapours during combustion which can injure gilding, plate, jewellery, picture frames, silks, or other material employed for use or decoration. The report, however, distinctly states that instead of the hydrogen from the water entering into chemical combination with the carbonaceous matters formed in the resin retort, and thus producing hydro-carbon gas of great purity and high illuminating powers, as put forth by Mr. WHITE, but contradicted by Dr. FYFE, no chemical combination whatever takes place. It, however, shows that while the gas really consumed is the olefiant and hydro-carbon, produced from the resin retort, the hydrogen formed in the water retort, and passing into the other, rapidly sweeps out, as soon as formed, the olefiant and richly illuminating gases, which by otherwise remaining for a short time in contact with the red hot walls of the retort, are rapidly decomposed into charcoal, and gases of little illuminating power; and the value of the water gas in thus rapidly removing them from this destructive influence, and retaining them in a permanently gaseous form, Dr. FRANKLAND considers can scarcely be over-rated. The principle has not been overlooked by coal gas engineers, several companies having attached exhausters to their retorts, which, however, perform their work very imperfectly compared with the water gas.

The average results of the whole of the experiments show that in illuminating power the *unpurified* hydro-carbon is superior to the Cannel coal gas of Manchester, in the proportion of 100 to 95·9, and the *purified* hydro-carbon of 100 to 88·9, proving that 1000 feet of hydro-carbon gas, *before* purification, are equal to 1042 feet of Manchester gas, and *after* purification, to 1125 feet; and that at the present market price of the articles employed, 1000 cubic feet of average hydro-carbon gas *before* purification can be produced, *exclusive* of rent, taxes, wages, wear and tear, according to the present mode of working, at from 9¼d. to 1s. 1½d., while the purified gas will cost from 10¼d. to 1s. 2¼d. per 1000 feet—the same burner may be advantageously used for both gases. A distinction must be made between unpurified coal gas and unpurified hydro-carbon gas. The former contains many deleterious ingredients which entirely prevent its use; the latter contains no noxious principle, but simply has its illuminating power diminished by the presence of carbonic acid. The generation of hydrogen gas from water free from this acid is a problem of great importance to the hydro-carbon gas manufacturer, the relative quantity varying from 10·78 to 4·72 per cent., according to the degree of temperature at which decomposition takes place, and to the degree of rapidity with which the water is admitted into the retorts. Dr. FRANKLAND considers that it may not be impossible, by varying the conditions, to get rid of it altogether. Lime, both in a wet and dry state, is quite inefficient for the purpose, and the author, therefore, recommends caustic soda, produced by mixing lime with a solution of common soda, as a most efficient and inexpensive agent for purifying this gas, when applied in the following manner:—Let 1 cwt. of soda be dissolved in not less than 120 gallons of water; add to this 70 or 80 lbs. of quicklime; mix the whole well together, and transfer it to the purifier, where it should be occasionally well agitated. After about 8000 feet of gas have passed through, the mixture should be run off, and allowed to settle in a suitable tank, from which the clear liquor floating above the sediment of carbonate of lime must be pumped up into the supply tank for the purifier, and being again mixed with the same quantity of lime, used as before. Thus little or no loss of soda occurs, this base being simply used as a conductor of carbonic acid from the gas to the lime. The cost of purification by this method would not exceed ¾d. per 1000 feet. This report, in connection with Dr. FYFE's, gives a tolerably clear view of the chemical character and economic value of this agent; and as the use of gas is now so greatly extending, the facts here elicited become of great commercial importance.

The Creditors' Bill of the COMPANY OF COPPER MINERS IN ENGLAND has passed the ordeal of the Committee of the House of Lords. The clauses have been gone through, the preamble declared proved, and the promoters of the measure, no doubt, consider that they have achieved a signal triumph over their opponents—at the same time freed themselves from the liabilities they have incurred by their reckless trading and gross mismanagement, and are now ready to commence a fresh career of improvidence and extravagance, trusting that at another period they will be enabled to obtain the same relief which they have at present had meted out them. According to this bill, every debenture-holder who holds debentures to the amount of 500*l.* is to receive stock to the amount of 250*l.*, the preference shareholders of the like amount 125*l.*, and the old stockholders only 62*l.* 10s., or only one-eighth of the original amount. New capital is to be created, which is to form the working stock of the resuscitated body. A capital subscribed of 1,250,000*l.* will be reduced to 300,000*l.*, and the association will, by their own showing, obtain for 70,000*l.* what originally cost 700,000*l.*—they estimate, at the same time, a profit of 30,000*l.* per annum, being about 6 per cent. on the new capital. This may look well enough upon paper, but judging from past circumstances, we can only view it as illusive and delusory. We know not upon what data this calculation is founded, but judging from the loose manner in which the affairs of the company have been carried on, we are inclined much to doubt its correctness. It may be in the recollection of our readers that in a recent case, FOX and HENDERSON *v.* the COPPER COMPANY, one of the highest authorities of the land, Lord Chief Justice CAMPBELL, was of opinion that the company had violated their charter: this was given them for the purposes of working copper mines in England and Ireland. Since they obtained that they have become copper smelters, colliers, iron and tinmasters, and we do not believe they possess, as a corporate body, a single share in any copper mine. Why is it, then, that they should be so specially protected, having a limited liability, which no other company possesses, and quite at variance with the Joint-Stock Companies' Act?

Their property, which is held under leases from the Earl of JERSEY, Mr. TALBOT, &c., consists of iron mines and collieries, together with farms, messuages, &c.; but we find in the auctioneer's catalogue no account of their copper mines. They were chartered for the exploration of these. Having failed to do so, holding no interest in that species of industry for the prosecution of which they were orginally chartered, it appears a singular anomaly that they are allowed to exist. Like other and less noxious monopolies, they ought long since, by the spirit of the age, to have been abrogated and abolished. Several railroad companies are in a like position, together with some questionable foreign and English mining concerns. Why should they not apply for a like measure of relief? Is it on account of its antiquity that this association is allowed to recommence its career of issuing debentures never to be paid, and selling shares to be converted into different kinds of stock under various names? The precedent established by the House of Lords in this case we have no doubt will be speedily followed by many other insolvent concerns.

In a pamphlet, dated 1725, the following remarks occur concerning some transactions in this company:—"Now the secret is out that the old 700 shares were so taken for the articles as a good cover to what follows. They were to be stock without paying anything for them, though they were virtually sold for 17,000*l.* as to all their interest, and again for 10,000*l.*, and yet to be preserved to the use of the old proprietors, notwithstanding they have not anything more than 100*l.* per anhum for 33 years then to come, either in stock of trade, manufacture, &c.; and what they may have after 33 years, or what interest, remains a secret—the *charter being for ever*. Can the old shares be so often sold, and yet remain the property of the old proprietors? All their interest is leased out to, and afterwards assigned over by, THOMAS CHAMBERS, jun., for 17,000*l.*; and are they not sold again virtually by THOMAS CHAMBERS, sen., then governor of the company, for 10,000*l.*? Can they be thus virtually twice sold, and yet remain the property of the old proprietors? Surely the persons who had this contract had some consideration for making so wild a bargain, or some other reasons fit to be inquired into. Were the property in the 700 shares first, and the trade on a just and a good economy, there might be a method soon found out to make every share worth the first 5*l.* paid for it. Poor, unhappy English Copper Company, which now that it is, or soon may be, worth something, must be broken up; that is, the company's effects sold in parcels, or for what it will fetch, or the proprietors so discouraged and tired out that they may sell out for what they can get under the present discouragements; but this is not the first time it has been served so."

From this short extract it will be seen that means similar to those at present used have been previously tried, though the making creditors partners is due to the more astute management of the nineteenth century, who we must in justice say, are far superior to their predecessors of 1725 in making "things pleasant," though we doubt, with all their good intentions, their ability to make them profitable. They have obtained their bill; they have now to raise the working capital: will they be able to do so? Judging from antecedents, and with the full knowledge of how the company are enabled to free themselves from their liabilities at stated periods, by Act of Parliament, we should imagine but few would embark their savings in this ancient chartered creditors' company.

[FROM A CORRESPONDENT.]

Two men were suffocated on Sunday, the 6th inst., in the Garth Colliery, near Swansea, by the smoke from the underground engine and the carbonic acid. Other lives having been previously lost in the same way, great excitement prevailed among the colliers and other inhabitants of the neighbourhood, which was, however, materially allayed by the coroner adjourning the inquest until he had communicated with the SECRETARY OF STATE, in order that a Government Inspector might be sent to assist at the inquiry. No inspector, however, appeared at the adjournment, and the complaints of the poor men were loud and deep. Unmeasured censure was passed upon a Government that had the means, but not the will, to help them; and really if this indifference to the sacrifice of human life be persevered in by those in authority, it is to be feared that some serious disturbance may ensue. The miners had long and patiently waited the enactment of a law to protect them from unnecessary dangers; and now they have obtained it, to be debarred all participation in the benefits it was expected to confer, is too bitter a disappointment to be endured with patience. We earnestly hope that this subject may obtain serious consideration, in time to avert the spread of the discontent which is fast gaining ground in the colliery districts, and that the complaints of a large and valuable portion of our industrial population will be speedily attended to by Government.

INSPECTION OF MINES.—We have been informed, on undoubted authority, that the four inspectors of mines have received instructions from the Secretary of State, immediately to prepare reports of their proceedings to be laid before Parliament. We look forward with much interest to the publication of these important documents, and trust they will be the harbingers of a better and more vigorous administration of the Coal Mines Inspection Act.

MECHANICAL TRAPPERS.—The employment of young boys to open and close the air or trap-doors in collieries, has often been the cause of fearful accidents, and the substitution of mechanical means has been strongly recommended. Several contrivances have been tried, but none have hitherto succeeded in acting with that precision and certainty which is essentially necessary to the safety of the mine. It gives us great pleasure to learn that this very desirable object has been accomplished by Mr. Robert Mills, the viewer of the Llanshamlet Collieries, near Swansea, and that a model of the machine is in the Great Exhibition. It is very simple in its construction, and consists of two levers connected together, one being placed on each side of the door, and both of them at right angles with the rail. On approaching the door, the tram moves the first lever, which immediately opens it, and after having passed through it the door is closed by the tram coming in contact with the second lever, and is kept shut until one of the levers is again acted on. It has been in use for some time in the Llanshamlet Collieries, and we understand worked very satisfactorily. The cost is comparatively trifling, and as the advantages to be derived from it are obvious, both as regards economy and safety, we hope it will be extensively introduced in all colliery districts.

COMPENSATING FLY-WHEEL.—The common fly-wheel, as ordinarily applied to steam-engines, carries the working parts through the dead points of the crank revolution effectually, and in a measure corrects the variations inseparable from a power communicated through a crank; but being fixed upon a shaft, it transmits all its uncorrected irregularity through any train of machinery connected with it, often to the detriment of fine manufactures, and rapid wear and tear of the gear work through which the power is transmitted. Mr. William Constable, of Brighton, has registered a fly-wheel, in which, while the hopeless task of compelling the fly-wheel to steadiness is abandoned—it being permitted to take up its oscillatory motion according to its caprice—the subsequent machinery is prevented from partaking in the slightest degree of the oscillations. There is a model, 3 ft. diameter, in the Great Exhibition. The wheel has three fixed arms, connecting the shaft with the circumference; and behind these are six other arms, hanging loose upon the cylindrical end of the shaft. On the face of each alternate one of these arms lies a spiral spring, partially compressed between two studs, which, being drawn upwards towards the circumference of the wheel, forces the spring by means of a collar into closer compression. The bolt, which passes freely through the spring, is connected to a roller on the fixed wheel by a strap; and behind this is another roller, connected by a strap, which is not a cylinder, but has about one-fifth of its circumference taken off nearly flat, forming what the inventor terms an isodynamic curve, so formed that in its rotary motion a lever of resistance within it, through which and the strap the fixed arm acts against the force of the spring, shall become lengthened as that force increases—the curve offering in every position a lever of resistance proportional to the force of the spring. With these appliances, the inventor states a perfect uniformity of force is obtained; that the invention claims not merely to improve, but to *perfect* the action of the reciprocating engine. It is simple, of easy and inexpensive construction, and but little liable to get out of repair. Engineers are strongly invited to inspect the model, as it is fully expected it will be immediately duly appreciated.

LEAD, COPPER, TIN, AND ZINC.—By a parliamentary return, printed yesterday, at the instance of Mr. Pendarves, it appears that the total quantity of pig and sheet lead imported into the United Kingdom, in the year 1850, was 11,857 tons; lead ore, 1700 tons; red lead, 7 tons; white lead, 40 tons; and chromate of lead, 1 ton. The nett amount of duty received thereon was 872*l.* 6s. 8d. The exports of British lead, in the same year, were as follows:—Lead ore, 165 tons; pig and rolled lead, 20,165; shot, 1750; litharge, 562; red lead, 2112; white lead, 2043. The principal exports were to Russia, France, and the United States. The copper imports in 1850 were—Ore, 40,388 tons; regulus, 5473; unwrought, 669; old metal, 431; bar, rods, and ingots, 4211; plates and coin, 11; copper manufactures and engraved plates, 35,946. The British copper exported from the United Kingdom, in the year 1850, was—ore, 150 tons; all other sorts, 21,307 tons. The total quantity of copper exported from the port of Liverpool within the year was 7360 tons. The total quantity of tin imported in the year was 1685 tons; and exported, 1588 tons. The duty received on the tin imported amounted to 5827*l.* The imports of zinc, for the same year, amounted to 18,626 tons; and the exports to 4573 tons.

COALS, CINDERS, AND CULM.—An account has been printed by order of the House of Commons, relative to the quantities of coals, cinders, and culm exported from the United Kingdom in the years 1849 and 1850, from which it appears that in 1850, 9,112,122 tons of coals, 35,541 tons of cinders, and 220,112 tons of culm were exported to foreign countries and to the colonies, being a larger quantity of coals, and a lesser quantity of cinder and culm, than in 1849. The declared value of these exports in 1842 was 1,087,122*l.*, and in 1850, 1,284,224*l.* The quantity of coals brought into the port of London coastways, and by inland navigation, in 1850, was 3,631,883 tons, against 3,380,786 in 1849.

CAMERON'S STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY.—Yesterday, Mr. B. Wall reported, from the committee on this company's (No. 2) bill, that they had heard counsel in support of a petition against the bill, and also in favour of the bill; and that the allegations contained in the preamble of the bill had not been proved to their satisfaction.

A deputation respecting the coal duties had an interview with Lord Seymour on Thursday, at the office of her Majesty's Commissioners of Woods and Forests, in Whitehall-place. The deputation consisted of Sir James Duke, Mr. Morton (Lord Durham's agent), Mr. Taylor (Duke of Northumberland's agent), Mr. Wood (Hetton Colliery), Mr. Davey, coal merchant, and Messrs. Potter, Hill, and Milne, coal factors.

NEW VEIN OF COAL.—The Messrs. James have struck the vein No. 3, known as the Dinas Vein, at their new pit of Diwyncelyn. It is said to be 4 ft. 10 in. thick.—John Calvert, Esq., has proved almost equally fortunate, having struck the same vein, of the thickness of 3 feet 10 inches, at his new pit at Gyfeilion. When these pits are in full work, they cannot fail to prove a great benefit to the surrounding neighbourhood.—*Swansea Herald.*

Her Majesty has been graciously pleased again to signify her approbation of the manufactures of Birmingham in the Great Exhibition, by becoming, through the Agency of the Hon. Colonel Phipps, Keeper of the Privy Purse, the purchaser of three of the gas chandeliers sent from the manufactory of Mr. Wm. Potts, in Easy-row.—*Midland Counties Herald.*

WHEAL CONCORD—THE SAME BILL STILL.

On the 3d July the meeting before the master was adjourned to Thursday last, in order that the interim might be occupied by the parties concerned in collecting such further evidence, in addition to the testimony then taken on oath before his Honour, as would be likely to clear up the apparent mystery in which the 70*l.* bill of Messrs. Gill and Rundle appears to be inextricably involved. But though the discussion of Thursday was prolonged to nearly three hours duration, matters remain in just the same position as that in which they stood before. Mr. Rundle was in attendance with all his books and documents, as before, but Mr. G. W. Snell (the purser) was not forthcoming.—Mr. Carpenter hoped his Honour would now decide the point; he had before him the sworn testimony of Mr. Snell and Mr. Rundle.—The Master asked if the purser was present, and was answered in the negative. His brother, Mr. W. Snell, said he appeared, and would wish to explain.—The Master: Do you appear for him, Sir?—Mr. Speed, as counsel for the official manager, said that Mr. W. Snell was the purser's deputy.—The Master: Why have we his deputy here? Why is he not here himself?—The official manager said the purser could not come up without having his expenses paid.—Mr. W. Snell said he would explain.—The Master (peremptorily): Who are you here for, Sir?—Mr. Snell: I am here as a contributory.—The Master: Do you appear for the purser?—Mr. Snell: I do, for the purpose of explaining.—The Master: Do you appear for him, or do you not, Sir?—Mr. Snell: Well, then, I say I appear only as a contributory; but I wish to explain why the purser is not here.—The Master: The purser has a claim here, but as he does not appear to substantiate it, I shall strike it out.

Mr. Carpenter said he would now ask his Honour for judgment in the case laid before him on the last day, and which was only postponed for the attendance of Mr. Snell, who did not appear.—Mr. Speed contended that his Honour could not give judgment until the purser was present, as he had some questions to ask him.—The Master: So have I. Why is he not here?—Mr. W. Snell: I can explain why he is not here if you——The Master (peremptorily): Do you appear for him, Sir?—Mr. Snell: I do not.—The Master: Then confine yourself to your own case, Sir. The purser is not here, and therefore I shall strike his claim out; now, let him take his remedy. I will not allow him to go backward and forward in this way.—Mr. Speed said that if the purser did not appear by the next day of meeting before his Honour his claim should be struck out; and now they would go on with the claim of Mr. Skinner for 68*l.* 10s. 11d., for which an action had been brought against him as a member of the company. This claim gave rise to a very warm discussion on both sides. On the part of Mr. Snell it was contended that he had paid several debts, of which this was one, out of a sum of 200*l.* he had received for that purpose. The clerk of the County Court of Tavistock contended that the debt was paid by Mr. Weeks, as the books of the court would show, and summonses were issued by parties for the recovery of other claims, which Mr. Snell had received money to discharge. This led to another warm discussion, which ended in the adjournment of the case for the production of the books of the County Court on one side, and of such documentary evidence by Mr. Snell, on the other, as would fortify his position. The claim of Mr. Crofts was next considered. It was shown that that gentleman had acted as secretary to the company from its formation to the period of the discontinuance of the works, at a salary of five guineas per month, and that he had also been a very efficient member of the liquidation committee since then; in fact, had been discharging all the duties of secretary just as arduously as before.

The Master said, he considered that Mr. Crofts was entitled to his salary as secretary up to the time of his resignation, but not after that. But he had no doubt he would receive a very handsome and cordial testimonial from the other members of the committee, as a mark of the high estimation in which they regarded the services of Mr. Crofts. His Honour concluded by expressing a hope that the "spirit of concord" had not so entirely departed from this Mine of Concord as to leave no hope of all those differences being ultimately arranged before another meeting in his office.

The parties then withdrew, on the understanding that endeavours would be made to arrange matters amicably in the office of the official manager.

The Master said, the official manager was a gentleman upon whom he looked as standing totally indifferent to all parties—one intrusted, no doubt, with great powers by the Act of Parliament, but whom he had seen exercising those powers hitherto with a degree of leniency highly creditable to himself, and which would be a sufficient guarantee to all parties that any arrangement proposed in his office would be satisfactory to those concerned; and when it should come before him (the Master) for his sanction, he had no doubt it would be such as he should approve.—The parties then left the office.

BASTENNE BITUMEN COMPANY—ANOTHER BILL CASE.

This was a case almost precisely similar to that of the bill in the Northern Coal Mining Company. In this case the directors passed a resolution to raise 5000*l.* by loan, but which, it was contended, they had no power to do by their deed. However, the London and County Joint-Stock Banking Company had discounted the bills of the Bitumen Company to the amount of 3000*l.*; and the present application was made by the bank as a claim for the amount of one bill for 350*l.*, which was drawn by the secretary of the company *per pro.*, and accepted by Mr. Rule, who was a partner and a director of the company, as well as a large creditor. If his Honour would admit the claim, it would place the bank in a position to take an action; but if he did not admit it now, the bill would come within the operation of the Statute of Limitations.

His Honour (Master Humphrey) admitted it.

MINING IN IRELAND.—In the *Mining Journal* of 24th May we inserted a communication from Mr. John O. C. Byrne, of Carrick-on-Suir, stating that some rich galena had been discovered near Curraghmore, on the property of the Marquis of Waterford. We have since received some further information on this subject, which may prove interesting to capitalists disposed to aid in the development of the mineral wealth of Ireland, and by judicious management realise a good return, while they open out new fields for the employment of the people. The setts, we are informed, comprise an area of several leagues in extent, containing galena, manganese, copper, iron ore of a superior quality, and other minerals; several lodes have been discovered during the past fortnight, which were unknown before, and what was ever considered almost barren table land is now found to contain hidden riches in abundance. There is also a copper mine at Bonmahon, into which the lodes of the Knockmahon Mine run, the setts being only separated by the river Mahon, and it is stated that Seafield (the name of the royalty) abounds in copper ore, far superior in quality to that of Knockmahon. It was partially worked about seven years ago, and it is said that the lode was 3 ft. wide, apparently solid ore. Indeed, the refuse at surface will convince the practical miner of the richness and quantity of the ore. It is further said that some underhanded trickery on the part of the agent alone led to its abandonment. We have every reason to believe that these statements are founded on fact, and add one more to the numerous convincing proofs we have, that if mining was legitimately and spiritedly followed up in Ireland, a complete amelioration of the habits of the people would be the result, and lead to their emancipation from wretched poverty, idleness, and crime.

THE PHILOSOPHER WITH HIS HAND IN MELTED IRON.—During the sitting of the British Association, at Ipswich, M. Boutigny was pledged to thrust his hands into a pot of melted iron, to be prepared for this purpose at the foundry of Messrs. Ransome and May. Accordingly, at a few minutes before seven o'clock, a large party assembled at the reception-room, and proceeded with the French philosopher to the place of fiery ordeal. A pot of glowing metal, red-hot from the furnace, being placed before M. Boutigny, this gentleman having damped his right hand with a little water, plunged it with perfect impunity into the mass. The sensation, he assured the spectators, was one of cold rather than heat, and he gave the following *rationale* of the phenomenon:—The moisture on the skin becomes converted by heat into that peculiar condition termed spheroidal vapour, which, being a bad conductor of heat, effectually prevented the skin from being burnt.

IMMENSE BLOCK OF STONE.—A block of red sandstone has been raised at the quarries of John Wright, Esq., of Runcorn-hill, of the following extraordinary dimensions:—Length, 39 feet 6 inches; breadth, 14 feet 6 in.; depth, 5 feet 4 in. It contained 3040 cubic feet, equal to 190 tons. The block was raised about 2 inches from its bed by means of wedges, and is now being cut up into pieces of smaller dimensions.

PULVERMACHER'S PATENT HYDRO-ELECTRIC CHAIN.—A most beautiful application of electricity to medicinal effect on human malady has just been patented under the above title, while its simplicity only astonishes the observer that something of the kind has never been before arranged and brought into practice. The principle on which this little apparatus is constructed is perfectly novel, for it absorbs itself the fluid necessary for its action, and can be excited by the mere perspiration of the body. It acts in every respect as a powerful voltaic pile, with mild effect. We witnessed the decomposition of water by a chain about the size of a necklace. The minute stream of the hydrogen evolved from one of the poles was beautifully evident, not larger than a silken thread, as the bubbles rose to the surface in succession. It will deposit metals from their solution, and exhibits all the properties on a minute scale which are observed in a larger battery. Its effect when worn on different parts of the human frame are said to be magical, without shock or any unpleasant sensation, relieving instantaneously all acute nervous pain—as rheumatism, nervous head, tooth, and ear ache, tic-douloureux—curing when worn for a time, by its mild but continuous action, a great number of inveterate diseases, as gout, local paralysis, histeria, liver complaints, &c.; and the proprietors in their prospectus invite persons afflicted fully to test these effects. Indeed, if medical galvanic electricity has curative action on the human frame, we know of no more elegant and gentle means of application. The chain consists of any number of flat links—each link formed by coiling a copper and zinc wire simultaneously round a small piece of porous wood, about an inch long, a quarter of an inch broad, and an eighth of an inch thick—a number thus forming a flat chain of any length required, either as garters, waistbands, or for other parts of the body. The action is brought about by soaking the chain in vinegar or water, or applying it to the exhalating cuticle; and, on completing the circuit, electric action, of course, immediately takes place. There is a simple arrangement at the fastening by which every motion of the body breaks and re-connects the circuit; so that, instead of a continuous stream, the current is applied to the system in a series of impulses.

A silver mine has been discovered in the arrondissement of Corte, Corsica near Radina. From the specimens which have been examined the mineral appears to be of a very rich quality, and it is of easy extraction.

The first ascent of a locomotive up a gradient of 1 in 40 has been made by the engine, *Save*, on the new Austrian Railway, which passes over the Semmering Mountain. The engine was of the eight-wheeled description, used on the Southern Austrian Railway. It drew up an eight wheeled loaded truck at the rate of 14 English miles an hour, and was stopped several times, resuming its journey at the will of the driver.

RAILWAY COMPENSATION CASES.

A court of inquiry was held at the Bush Inn, Swansea, on the 8th, 9th, and 10th inst., by George Powell, Esq., the umpire appointed by the Commissioners of Railways, to determine the value of the land taken from the Millbrook Iron Company by the South Wales Railway Company, for the purposes of their railway, and also to determine the compensation due for the damage sustained by the erection of the Landore Viaduct, on the ground belonging to the Millbrook Iron Company. Mr. Sergeant Allen was counsel for the claimants, and Mr. Lloyd appeared for the railway company.

Mr. Sergeant Allen opened the case on behalf of the claimants in a most lucid speech, from which it appeared that the land in question is situated between the canal and the river, and opposite to the works of the Millbrook Iron Company, from which it is separated by the turnpike road. Great value was attached to it in consequence of its peculiar eligibility for sites of tin plate-works, and for iron manufactories, which it was in contemplation to erect before the railway was projected, and which might have been carried on very advantageously in connection with the existing works. For this land, and in satisfaction of the damages, the railway company had offered 550*l.*, but no demand of any precise amount had been made by the claimants. The learned sergeant then called the following gentlemen in support of his case:—Mr. W. P. Struvé, C.E., was well acquainted with the property in question, and after mature deliberation, he estimated the value of the land taken, and the damages sustained by the Millbrook Iron Company, at 3070*l.* He also stated that a considerable portion of coal in an adjacent colliery would be lost in consequence of the piers of the viaduct interfering, and, in fact, preventing the construction of a culvert, so as to drain the coal to the level of low-water mark, and the water would, therefore, have to be pumped by steam-power, the first and annual cost of which he valued at 2250*l.* Subsequently Mr. Lloyd, on behalf of the railway company, agreed that the culvert might be made, and that all requisite assistance and facilities should be given. In consequence of this understanding, and a grant to the claimants to have a free passage and access to the ground under the viaduct and between the piers, which was granted to the claimant by an agreement under the seal of the railway company, this claim was withdrawn. Mr. Joshua Richardson, C.E., had inspected the ground and the adjacent property, which had been taken and injured by the railway company, and valued it at 3301*l.* He also confirmed Mr. Struvé's estimate of the loss which would ensue on the want of drainage to the adjacent colliery, and thought the construction of a culvert 24 ft. below the surface, between the piers of the viaduct, would endanger the stability of that structure, as the ground on which the foundations rested was loose gravel and wet sand. Mr. R. W. Attree, land valuer, estimated the value at 3,222*l.*; Mr. William Williams, mineral surveyor, valued it at 2840*l.*; and Mr. Rice Hopkins, C.E., with his usual ability and acumen, gave excellent evidence on the several points at issue. He valued the land and damages at 2877*l.*, and concurred with the evidence given as to the drainage of the coal. All these witnesses underwent a close and able cross examination by Mr. Lloyd, but without in any way affecting the value of their testimony. For the railway company, Mr. Lloyd called the following gentlemen:—Mr. R. W. Jones, C.E., who valued the land at 274*l.*, and the damages at 100*l.*; Mr. James Hall, surveyor to the corporation, valued the land at 297*l.*; Mr. Thomas Strick at 270*l.*; and Mr. W. Richards, architect, at 300*l.* Mr. Lloyd then addressed the umpire at considerable length, characterising the valuations for the claimants as exorbitant and extreme, and created repeated laughter by his good-humoured witticisms and happy quotations. Mr. Sergeant Allan replied in an eloquent and masterly speech, in which he ably combatted his learned friend's positions, and endeavoured to confirm and strengthen the evidence he had brought forward.

On Friday morning, the 11th inst., the case of the Rev. Thomas Morris was opened by Mr. Sergeant Allen, with great perspicuity and force, from which and the evidence adduced, it appeared that the claimant's land had been seriously deteriorated in value by the railway passing through it on a deep cutting on the main line, and with high embankment on the Swansea branch. For the land taken, and the damage inflicted on the claimant, the railway company had offered only 500*l.* The witnesses called proved the value of the adjacent land as building ground, and as deposit ground for slags, and stated that as this land was equally eligible for such purposes, they had taken the price paid by the railway company to Mr. Bennel, for the adjoining land, as a guide in their estimates. The land and estimates were valued as follows:—Mr. W. P. Struvé, 1370*l.*, in which Mr. Williams concurred. Mr. Joshua Richardson, 1480*l.*, which was confirmed by Mr. G. W. Attree, whilst Mr. Rice Hopkins estimated it at 1220*l.* In addition to these sums, a further damage of 700*l.* for the loss of seven acres of coal and way-leaves was claimed in case the railway company refused to erect a bridge over the cutting, and an arch through the embankment; as the railway company agreed to make these accommodations, this item was withdrawn. Mr. Lloyd replied with his usual tact and ability, but declined to call any witnesses.

On Saturday morning, the third case was entertained, which was for two wharves, held by Mr. G. B. Morris, under a lease from the corporation of Swansea, and taken by the railway company, for which the company had offered 1800*l.* In opening this case, Mr. Serjeant Allen animadverted in strong terms on the conduct of the railway company in compelling his client to have recourse to these expensive and harrassing proceedings, in order to obtain a fair and reasonable value of the property which they had compelled him to give up to them. He stated that Mr. Morris had 12½ years' unexpired interest in his lease, and that the reversion of it had been purchased of the corporation for 400*l.* per annum. His client only asked for the same estimate of value in determining the amount which was due to him—regulated, of course, by the number of years he was interested in the property; and he (the learned serjeant) was prepared to prove that the value given to the corporation was by no means exorbitant; but, on the contrary, reasonable and fair. Mr. Mansfield was then called to produce the agreements between the railway company and the corporation of Swansea, which, however, was objected to by Mr. Lloyd; and their admission not being persisted in, they were withdrawn; and Mr. W. P. Struvé then gave evidence of the present value of the wharves on the river, and was of opinion that much larger rents would be obtained for them on the completion of the float, and when the increased facilities for commerce which it would afford had been fully developed. Taking the price paid to the corporation as the basis of his calculation, he estimated these wharves at 4193*l.* Mr. Joshua Richardson concurred in Mr. Struvé's valuation; and stated as the result of his experience in the improvement of navigable rivers, and the construction of harbours in different parts of the kingdom, that, by giving increased accommodation by floats or otherwise to the shipping, the value of the wharfage ground was invariably augmented to a considerable extent. Mr. S. Dillwyn was well acquainted with the property in question, and with the rental given for wharves on the river. He agreed in opinion with Mr. Richardson that the float would have a tendency very considerably to increase the value of them, and thought Mr. Struvé's valuation a moderate one. Mr. Starling Benson was well acquainted with all the property on the river, and concurred in the estimate of the value of the wharves in question which had been given by Mr. Struvé. Mr. R. Hopkins had gone through the estimates with Mr. Struvé, and agreed with him in the valuation he had made of these wharves. Mr. Lloyd replied and defended the conduct of the directors in this case. He then made a few brief remarks on the evidence adduced for Mr. Morris, and again declined calling any witnesses. The proceedings then terminated, and the professional gentlemen from a distance were soon after seen hurrying to the railway on their way to their several homes.

MANUFACTURE OF STEEL.—Mr. H. M. Ommanney, of Chester, has patented some improvements in the manufacture of steel. The peculiarity of this method of manufacture consists in employing iron ores, being oxides of iron, and other oxides thereof previously deoxidised by exposure to different degrees of heat, in an open furnace so constructed that the ore or oxide and carbon may be introduced at a part of the furnace where the temperature is comparatively low, and may be successively removed to hotter parts, being subjected the while to continued stirring; for which purpose, and for the introduction and removal of the matter operated on, each compartment of the furnace is provided with suitable doors or openings. The patentee has shown and described an arrangement of reverberatory furnace adapted for the purpose of his invention. It consists of three compartments communicating with each other, heated at one end in the ordinary manner, and provided with a hopper at the other end to facilitate the supply of the ores, &c. When the furnace is raised to a proper heat, the compartment at the fine end, or No. 1, being a black red heat, the next compartment, No. 2, somewhat hotter, and No. 3, or that at the grate end, of a bright red heat, the mixture of ore and carbon (by preference charcoal) is introduced through the hopper into No. 1. It is then stirred with iron tools (such as are used by puddlers) for about an hour and a half, when it is turned into the next compartment, and No. 1 immediately charged again. The charges are then passed through all the compartments in succession, and remain in each for an hour and a half; and according to this system the process may go on continuously, each charge being worked altogether about four hours and a half, which has been found to be sufficient to complete deoxidation. The deoxidised ore or iron, after removal from the furnace, is balled up in the puddling furnace in the ordinary manner; but if it should be found to have a tendency to form itself into lumps, it is submitted to a grinding or pounding process, and, when reduced to powder, passed through the puddling furnace and balled up, as is well understood. The balls when removed from the furnace are made into blooms, or hammered into cakes, plates, or bars, which are afterwards cut up and converted in the converting furnace; or they may be charged at once with the requisite degree of carbonisation for steel of any temper, by adding carbon (in the shape of charcoal) in the crucible or melting operation. The patentee does not claim the exclusive use of the furnace described, except when employed for the purpose of his invention; but he claims the improvement in the manufacture of steel from ores and other oxides of iron deoxidised at successive temperatures, as above described.

ON COPPER SHEATHING, AND THE PROBABLE CAUSE OF ITS DETERIORATION.—No. IV.

BY JAMES NAPIER, ESQ., F.C.S.

About the same time these South American ores were introduced, came into use Muntz's yellow metal, an alloy of two equivalents of copper and one of zinc. The success of working this alloy depends much upon the purity of the copper used; hence, with an increased supply of impure ores, came an increased demand for good quality of copper to make this alloy, which copper was, consequently, taken out of the copper market. This was obtained by the process termed "selecting," and to show the bearing of these circumstances upon the subject under consideration, I must briefly describe the process and principle of smelting and selecting. The ore is first calcined by being placed on the floor of a large high-roofed reverberatory furnace, and kept at a dull red heat for several hours, which expels a great quantity of the sulphur, and oxidates a portion of the iron. It is then fused in a separate furnace, the silica and oxide of iron combining forms scoriæ, or slag; the copper with iron and sulphur combines, forming what I have described as regulus; the slag or scoriæ floats and is skimmed off, the regulus is tapped into a deep pit of water, which granulates it. This granulated regulus is again subjected to calcining and fusing, until the iron is mostly all oxidised, when the copper remains as a sub-sulphuret, with a little iron and a portion of the impure metals. This product is now roasted, by being put into a reverberatory furnace furnished with air holes, and kept at a semi-fluid state, with a free current of air passing over the surface. The reaction may be thus explained: a portion of sulphur is carried off by the oxygen of the air, and the copper is oxidated, and this oxide of copper instantly reacts upon, or is decomposed by, another portion of sub-sulphuret, the copper of both being reduced to the metallic state without any carbonaceous matter. Copper in the fused state has a stronger attraction for sulphur than any of the other metals, so that when copper begins to be reduced, it will first reduce all the other sulphurets present, except iron. Therefore, by carrying on this roasting until about the half of the copper is reduced, and then tapping the furnace, this reduced portion will contain all, or mostly all, the impurer metals which had existed in the regulus. The sub-sulphuret remaining is selected and reduced by itself in a separate furnace, to make pure or select copper for yellow metal. Thus the process of selecting affected the whole copper trade, and particularly the sheathing, for the yellow metal was not only a competing article with ordinary sheathing, but its production almost necessitated the deterioration of that against which it was to compete. The reduced copper with the impurities was taken and subjected to long roasting and refining; if the quality after that would bear rolling it was used up for sheets, if not it was sold as tile.

The copper trade is now almost entirely relieved from these circumstances by the abundant supply of Australian ores, which are mostly all pure, giving copper of the best quality; however, as far as regards the past, and the question under discussion, these circumstances all tend to show that the cause of the deterioration of sheathing is impurity in the copper.

The question now occurs, what are the impurities which have thus deteriorated our copper so much? The paucity of rigid analyses of copper, and especially that used for sheathing, prevents a positive answer being given to this question; but of the few analyses which have been made public, with one or two exceptions, it is remarkable that there is no mention made of the presence of antimony, but often of tin, and in those given by Mr. Prideaux, there are both zinc and tin. These analyses were no doubt made with the greatest care, nevertheless we cannot help thinking that the presence of this metal has been overlooked. Our reasons for thinking so are, that antimony is an ingredient in almost all Cornish ores, and in most of the Spanish and South American ores. Out of 21 samples of sheet-copper obtained in the market, the analyses of which I have either made or seen, not one was entirely free from antimony, and while some had only a trace, one sample had as much as one-half per cent. Only three of these contained tin, two had sulphur, and none zinc. From upwards of 50 commercial samples of ore from as many mines in Cornwall and Devonshire, not one was free from antimony, and only 14 contained tin. However, the character of mines varies in a series of years, and the ores obtained 50 years ago from these localities may have been purer.

The absence of lead in any of the analyses given is another thing worthy of remark. Mr. Prideaux mentions that a little lead is put into the refining, but says it is only to scorify the tin, and reduce any sub-oxide, but it does not remain in the copper. This is not the only reason for lead being put into copper. Lead, where there is antimony, is essential to enable the copper to roll. Copper with from 300 to 500 per cent. of antimony would be hard and brittle without lead, but I have seen copper with 0·65 per cent. of antimony having been made tough to roll by lead, and in use as sheathing. Two analyses out of many will suffice:—

Hard copper would not roll.		Copper in sheets said to roll well.	
Copper	99·40	Copper	99·35
Iron	0·10	Iron	·08
Antimony	0·06	Antimony	·15
Sulphur	trace—99·56	Lead	·11—99·69

Here, then, the presence of antimony is not only bad in itself, but it necessitates the addition of another impurity to it, and one I consider also deleterious to sheathing. External appearance also of the sheets favours this view of the question. "Recent sheathing," says Mr. Prideaux, "is complained of as being less smooth and compact than old sheathing." Exactly what the presence of these alloys will give as they become scorified on the surface during the annealing and rolling. "Good sheathing becomes quickly covered with a thin scale or crust of green, which adheres all over, and seems to remain. Bad sheathing keeps brighter, or takes on a soft blue crust, with patches or edges of purple." These are exactly what the experiments of Sir H. Davy, and the view here taken of the subject, would lead us to expect from pure and alloyed copper.

I have also had my laboratory experiments, extending over many months, and not yet complete, hoping to find some data to follow, but so far as results have been obtained, I am still bound by the inferences drawn by Sir H. Davy. I have taken all the published analyses of sea water from different localities, and made up little quantities accordingly, and submitted pieces of copper of the same quality to their action. The only conclusion yet apparent is, that chloride of magnesium is more destructive to the copper than any of the other salts found in sea water; and, according to the principle of diffusion recently defined by Prof. Graham, the chlorides being most easily diffused, there is an excess of chlorides over sulphates near to the mouth of large rivers, which may account for the rapid destruction of sheathing sometimes observed on vessels lying near the mouth of rivers. However, I do not give this as any explanation of the general question.

I have, again, taken copper alloyed with from 1 to 2 per cent. of other metals, as zinc, iron, lead, arsenic, tin, bismuth, cobalt, nickel, and antimony, and submitted them to the action of sea water. The results, so far as they have gone, only tend to verify the general opinion, that pure copper is acted upon more rapidly in salt water than alloyed copper. One general principle seems indicated—viz., that copper alloyed with a metal electro-positive to it is more rapidly acted upon by sea water than when alloyed with a metal electro-negative to it, so that I would infer that a ship sheathed with copper of various qualities of alloy, however minute, will be more rapidly destroyed than if sheathed with copper of one quality. The sample alloyed with antimony was least acted upon, that with no alloy most, the proportion being as three to seven; therefore, if a vessel was sheathed with a mixture of these qualities the waste would necessarily be rapid, and an analysis of any single sheet from the vessel would not give the true cause. This, I believe, has led to much error. One sheet having worn well is analysed and found to contain an alloy, another wearing thin in two or three years is found nearly pure; hence, alloyed copper is recommended, and this is no doubt the cause of the haphazard manner in which different applications have been made, to the disappointment and loss of many.

I had intended calling attention to the various patents taken out for improvements in sheathing, as an illustration of the great want of practical knowledge, and of the application of principles to such questions, which often tends to give our merchants and manufacturers a very indifferent opinion of the value of science, but time will not permit. Only one of the numerous patents taken out had stood the test of experience, as I have already noticed—viz., Muntz's yellow metal; and any want of uniformity in the sheets of this alloy also causes more rapid destruction of the sheathing.

Mr. Sheriff Robert Walter Carden and Mr. Sheriff George Edmund Hodgkinson were presented to the Queen on Thursday, when her Majesty was graciously pleased to confer the honour of Knighthood upon both.

THE USE OF THE BAROMETER IN COAL MINES.

At the Yorkshire Geological and Polytechnic Society, Mr. W. S. WARD, F.G.S., Leeds, read a paper "On the Use of the Barometer in Coal Mines, and a Cheap Form of Instrument for that Purpose." He said he should not on that occasion attempt to discuss the necessity of using the barometer to prognosticate the state of the air in coal mines, as that had been proved in a paper by Mr. West. His object was to introduce the barometer to prevent accidents in mines. It was not the absolute height at which the barometer stands which would indicate danger, but the amount of diminution of pressure or rarefication of air which had taken place within a given time. Suppose the waste or goaf of a mine contains 10 times the cubic capacity of the parts of the mine regularly worked and ventilated, if the barometer fall even as low as 28 in., so that it fall very gradually, the ventilation may carry away the carburetted hydrogen issuing from the goaf and fissures, and no danger be perceived; but if the barometer suddenly falls 1-10th of an inch the gas in the goaf would expand 1-100th part, throwing into the workings 1-10th of its volume, and producing an explosive mixture. To guard against that, there should be a regular series of barometric observations taken in each pit, and the record sent to some party who might compare the observations with others taken either in other pits, or by parties keeping a regular register at a considerable distance. Such comparison of registers would produce an efficient check on the man who had to record the barometric variations. At least four observations should be taken during the 24 hours, and whenever any fresh set of men went down to work, so that they might receive timely caution of danger. After exhibiting a simple method by which a wholly illiterate man might take and record the barometrical observations, Mr. Ward described a form of instrument that he had contrived, which, while thoroughly efficient, might, with moderate demand, be supplied at a cheap rate—say, from 15s. to 1*l*.

Mr. JEFFCOCK inquired in what part of the pit it was proposed to place the barometer?—Mr. WARD said that, perhaps, the best situation would be the place where the candles or lamps were kept, so that it might be seen by the men, and if necessary they might receive a caution before they began to work. He wished it to be understood that he was speaking of mines in which exposed lights might under ordinary circumstances be used. Where safety lamps were required the barometer was of no use: every precaution was indispensable, and there might be danger, though not indicated by the barometer.—In reply to another question by Mr. Jeffcock, Mr. WARD said it would not be necessary to have a barometer in every part of the pit where the men worked, as its object was not to indicate the amount of inflammable gas. It was simply designed to show when the atmosphere was low, that being the time when most gas escaped from the goafs and fissures.

The CHAIRMAN remarked that nearly all the explosions in the north had happened in a low state of the barometer after a sudden fall. In this neighbourhood, where a totally different system of working prevailed, explosions had mostly proceeded from an insufficient circulation of air in the goafs, or exhausted parts, to dilute the gas as it escaped from the coal, and reduce it below the inflammable point. On the usefulness of the barometer there could scarcely be two opinions. It was a singular fact that the illiterate miners know instinctively that a south wind induces bad air in the pits. In this neighbourhood they imagine that the south wind blows through the whole strata, which inclines upwards to the south, and that the mine is thus filled with bad air. But however false in philosophy, being an observation founded on fact, it is practically of use to the miner, because as a general rule the south wind is accompanied by a low state of the barometer and a sluggish circulation of air as a consequence. The barometer, by showing the pressure of the atmosphere, indicates the amount of escape of gas and induces caution, on account of which it is a very necessary instrument. It was not necessary that the barometer should be kept in the pit at all: the engineman at the top is generally the best educated, and if under his charge any portentous change took place he could communicate instantaneously with all parts of the pit.

ED. J. DENT has REMOVED from 82 to 61, STRAND, and solicits an INSPECTION of his extensive STOCK of CHRONOMETERS, WATCHES, and CLOCKS, as above, also at 33, COCKSPUR-STREET and 34, ROYAL EXCHANGE (Clock Tower area). 49

IMPROVED LIFTING JACKS,

MANUFACTURED BY

W. AND J. GALLOWAY,

PATENT RIVET WORKS,

MANCHESTER.

The attention of parties who employ

Lifting Jacks,

is respectfully requested to the superiority of those annexed, over those hitherto in use.

IMPROVED RATCHET JACK.

HALEY'S PATENT LIFTING JACK.

50

IMPORTANT SAVING IN MINING OPERATIONS.

GUTTA PERCHA HOGAR PIPES, AND SPEAKING TUBES IN MINES. 51

The GUTTA PERCHA COMPANY have been favoured with the following important Letter from EBENEZER ROGERS, Esq., C.E., F.G.S., Abercarn Fach, near Newport, Monmouthshire:—

March 31.—In reply to your inquiry as to the use of gutta percha as a material for the Hogar pipe used for taking up water in sinking shafts for mines, I have pleasure in stating that my application of it for this purpose is perfectly successful.

The ordinary slide pipe is entirely superseded by the gutta percha Hogar pipe, and it will be evident to every person experienced in mining, that the flexibility and lightness of the latter admits of sumping in any part of the pit, without the great amount of labour attendant on that operation with iron pipes.

The freedom from liability to accidents in blasting, and the great facility with which repairs can be effected in case of damage, cannot fail to recommend your material to the notice of every person engaged in mining operations.

The gutta percha Hogar pipe, which we have now in work at the Abercarn Collieries, is about 20 feet in length, and after very severe trials in sinking through hard rocks, where the expensive slide and stock would be always liable to breakage, the gutta percha is little worse for wear. I am also glad to state that the 400 feet of speaking tube for communicating between the top and bottom of the shaft answers admirably, and is a great economist of time. EBENEZER ROGERS.

GUTTA PERCHA PUMP BUCKETS.

COPY OF LETTER FROM MR. C. THOMAS, DOLCOATH MINE, CAMBORNE.

Camborne, Jan. 27.—Three gutta percha 12-inch pit boxes, or pump buckets, drawing water 7½-feet stroke, have been used and worn out in this mine, and I beg to inform you that they have lasted on an average six weeks each, giving double the average wear of leather boxes, or buckets. This alone is important in saving time and cost of changing boxes, especially in long lifts, and gutta percha requiring no nails for gearing, the working pieces will doubtless last much longer. On the whole, we much prefer gutta percha to leather for boxes. CHARLES THOMAS.

SYPHONS FOR MINES,

FROM MR. A. CROSFIELD, TY MAUR COLLIERY, NEAR PONTY-PRIDD.

The gutta percha pipe sent me for the purpose of employing it as a syphon for drawing water from a damp heading at these works, answers admirably; and, although the pipe is so small, it is surprising the quantity of water passing through it. I consider that gutta percha piping may be applied in mines and collieries to very valuable purposes and is especially adapted to be used on the syphon principle, where local circumstances will admit of such application.

MINERS' CAPS.

Northumberland Miner's Cap.

Cornish Miner's Cap.

The GUTTA PERCHA CAPS are not only Waterproof, but afford peculiar protection to the wearer from the Falling of Loose Stones, &c. &c. &c.

EVERY VARIETY OF GUTTA PERCHA ARTICLES SUITABLE FOR MINES—viz. Hogar Pipes, Pump Buckets, Clacks, Speaking Tubes, Engine Packings, Syphons, Miners' Caps, Waterproof Soles, &c.,

MANUFACTURED BY THE GUTTA PERCHA COMPANY, PATENTEES, *No.* 18, *WHARF-ROAD, CITY-ROAD, LONDON.*

*** Specimens may be seen on application to the Company's dealers.

TINCROFT MINING COMPANY.

A special general meeting of shareholders was held at the offices, Salvador-house, Bishopsgate-street, on Thursday, the 17th inst.

GEORGE B. CARR, Esq., in the chair.

The notice convening the meeting having been read from the *Mining Journal*, the CHAIRMAN opened the proceedings by requesting one of the committee to read their report.

Mr. J. P. HUBBUCK did so, stating that it had been printed and circulated among the shareholders the day preceding. Being a very lengthy document, it occupied the time and attention of the meeting for upwards of one hour, and was listened to with great patience by the numerous auditory then assembled.

The committee commeuce their report by considering the company's affairs under three several divisions—finance, state of the mine, and the local and London management. As to the first, they find the company considerably in debt; the estimates made of the value of the tin not realised; bills for supplies not charged at the time the goods were supplied, to the extent of 2500*l*.; so that to put the concern in a healthy position, they deem it necessary that 12,613*l*. 10s. 9d. should be provided to clear off liabilities, pay for future supplies in the most economical manner, and wait for the returns from sales of ore until the regular and legitimate period, usual in other mines. They further express their judgment that the two last dividends (10s. and 7s. 6d. per share) were declared and passed on wrong estimates, and ought never to have been made. Respecting the state of the mine, by Capt. T. Richards's estimate, it appeared that about 65,000*l*. worth of ore was discovered, to realise which would cost in tribute, and rendering it marketable, 32,000*l*., independent of dues, water charge, and agency, during which sundry specified work has to be done, that would involve considerable expenditure. As regards the management, the committee are of opinion that the whole of the executive should be re-modelled. The mines have been overworked. They conclude their report in unmeasured terms of censure and disapprobation, but couched in words so uncourteous in all respects, that we regret not our space renders it out of our power to dilate further upon it, and which is rendered the less necessary by the document having been printed by the committee for circulation.

Mr. HUBBUCK stated that there had been some delay in furnishing this report, but it had proved no trifling affair, and could not be done in a day. The printed copies were ready at the office yesterday, and why not distributed it was not for him to say.

Mr. BIRDSEYE said that, to his certain knowledge, a portion of the public had been made aware of part of the contents and of the general tendency of the report a month ago, and yet it had been kept back from the sight of the directors and others until yesterday. Was that right?

Mr. FIELD said, it appeared to him to contain a mass of grave matter for the discussion and cool consideration of the board; he, therefore, suggested that the meeting be at once adjourned to give time for a counter-statement; and as he had taken an active part in the appointment of the committee, being the party who proposed them, he was sorry to say that he saw reason to make great complaint at the intemperate language it was couched in, and the personalities unnecessarily used, for at best it might turn out to be only matter of opinion, formed on erroneous and too hasty a judgment: inferences were easily formed by one man, at considerable variance with those of others. The real question was, had the property been judiciously managed for seven years or not? and if not, what change was necessary? There were many things charged as incorrect, and if they could not be shown otherwise, should be remedied for the future.—Mr. W. HEALL (of the committee) disclaimed all personal feeling on behalf of the committee generally. It was an unpleasant task they had been employed in, and to find cause to make such a report; but it was their duty, and they were perfectly ready to defend themselves for doing it in the manner they had.

Mr. FIELD commented generally on the objectionable language used throughout the report, and particularly the concluding part, the reading of which caused much sensation in the meeting.

Mr. T. C. MUNDEY (of the committee) contended that the charges of mismanagement, &c., specified in the report were borne out by the facts, although the language used might be considered rather forcible, still it was truth. By the delusive reports frequently shown at the office, many gentlemen had been induced to part with their money at a considerably higher price per share than could now be realised, consequently, were great sufferers thereby. He concluded by saying that the committee had received every assistance in their scrutiny, and were allowed to inspect every book, document, or paper by the board, who offered them every facility throughout their prolonged investigation of the company's affairs; and it was due to them to say, the committee could not discover one act of private trading, or otherwise, in which the board had been mixed up individually in the transactions of the company.

Mr. R. H. PIKE (the purser of the mine) here rose, and said he thought it would be saving the time of the meeting if they would at once permit him to make a few observations, somewhat explanatory, which would remove many false impressions attempted to be made in the report, and he doubted not the board would then find little difficulty in entirely getting rid of the remainder. The report certainly contained big and ugly words—charging fraud and dishonesty where there had been none, and mismanagement which the committee could not substantiate. At page 5, he said, they taxed him with "cool indifference;" while his reply, which laid before them, exonerated him on that score, for it concluded in the following words:—"Any further explanations required, I shall be most happy to furnish." At page 34, they talked of "concealed merchants' bills" charged in April, and 1000*l*. worth of tin credited when only sampled. Now, that parcel of tin was actually in the custody of the smelting company at the time, and four days after 1001*l*. 0s. 11d. was actually received for it. This they knew long before they penned the report. As to keeping back the charging of merchants' bills, he would take all blame to himself; for when a new plant was required, it was usual and customary to charge for it over a certain period of time, varying according to circumstances, and under mutual understanding. For instance, at Wheal Buller, the new engine (2000*l*.), no part of which was charged for some months, although plenty of cash in hand, and paying the usual dividends. As to Tincroft, it was a first-rate mine, likely again to make early and considerable dividends. From the continued fine courses of ore they had of late so frequently met with—better than had ever been anticipated—the profits would speedily wipe away the debt, and then give dividends to the shareholders. The opinion of their manager (Capt. Floyd) was amply borne out by that of every other unbiased agent who had visited the mine, and would be confirmed by all the leading men in the west of Cornwall, as, in fact, it was by Capt. Puckey, one of the most experienced miners of the east, from Par Consols Mines and Fowey. The concern would bear the inspection of such talented and old practical men as these, and surely the shareholders would not entirely rely on the opinion of a single agent sent by the committee, who was so much their junior in age and practice, and who had been proved to have formed an erroneous estimate of the Carn Brea Mines, and might be equally mistaken as to Tincroft. His estimate, too, of their liabilities at 13,000*l*. was wide of the fact, for it was but 6000*l*., and that in a fair way of liquidating itself. The amount of bills kept back, or, at all events, a considerable part thereof, was known to the board, or ought to be, and, as he had explained, was no unusual thing in mining, especially when goods were purchased not for immediate consumption.

Mr. JOHNSON stated that on the 28th April he had laid openly before the company, at their meeting, that 2500*l*. were due on such accounts. He knew that there was some amount to charge, but had not ascertained it was so much till then. He had had but very little time to peruse the committee's report, wherein he found so many things brought forward against them as directors, and in language that men of gentlemenly feeling were not bound to receive. He must now express his gratification at hearing the committee declare that they made no charge of peculation, nor any act of dishonesty, which he considered was very different to the sentiments conveyed in the report itself.

Mr. MUNDEY said the committee had no such charge to make, and the complaints made were against them as a body, and not in their individual capacity.

Mr. JOHNSON further stated that from 5000*l*. to 6000*l*. could be shown to have been very recently incurred for new boilers, machinery, and work, whereby 2364*l*. of the bills had accumulated in the space of four months, and which had brought the concern to its present condition. He could not be brought to think that the committee had any object of injuring the property, for they were all probably interested in it, and their deputed agent could not think ill of it, when he recommended calls at once being made to the extent of 13,000*l*., to put the financial department in a more healthy state. It could be shown that he had gone beyond the very extremity, for 5317*l*. would suffice. Upwards of 1300*l*. of available stores were still on hand: he had made no note of this, though complaining that the charge for them had not been sooner made, and the accounts for the last two months would show a clear profit of 2000*l*. and upwards, yet no mention or allusion was made to this. This induced him (Mr. J.) to go down to Cornwall, from whence he had just returned, and did not hesitate to say, after 36 years' acquaintance with mining, that Tincroft was in excellent working condition, with great and reasonable expectations of paying well. Duncan's lode looked very promising. Grout's lode yielded ore of the richest description. Had taken some pains, and found that Tincroft, on an average of 10 years, had paid at the rate of 5½ per cent. per annum, and was likely to do so again.

Mr. HERRON asked whether Capt. Floyd had not stated that a considerable outlay must be undertaken before profits could be made?

Mr. JOHNSON: Not exactly; he proposed a new shaft, and the cutting down of another, as likely to expedite and increase the profits, but since then he had cut down the shaft to the 140 fm. level, and put a tram-road in, which would economise the future labour, and give greater facilities to the workings.

Mr. FIELD asked whether the profits thus made had been by working "underhand," as complained of by Capt. T. Richards?

Mr. JOHNSON explained that they were not working in the manner pointed out in their bottom level; he was happy to tell the shareholders present that an unconcerned mining agent, Capt. Thomas Treweeke, from some distance, had been down the Tincroft Mine for a shareholder who held a considerable interest, and whose report would be read.

Mr. MORGAN then read some extracts from a letter, dated 20th June, written by Capt. T. Richards, wherein he says, "I have no wish to knock the mine down, but they are picking the eyes of her out, both in the bottom and back, and all the materials they have would not fetch 10,000*l*."—The reading of this created some excitement.

Dr. SPURZEIM rose and stated that he had been for a considerable number of years connected with mining, from a natural attachment he felt towards it and science generally, and he had frequently seen very bad feelings excited from ill success, which led to unkind conclusions as to the conduct of the persons managing. He had met the highly respectable gentlemen connected with Tincroft board for a series of years, and had tested them in all matters of figures and facts, and never found them wrong. Faults had been found: to sooth and pacify the parties making them, a committee had been chosen, who had acted more like executioners than gentlemen, by giving forth to the world a printed document calculated to do an exceeding injury to their property, which would be damaged by being harshly condemned, instead of asking for and receiving explanation as they progressed in their examination. Their characters had likewise been assailed; but wishing to see a more kindly spirit maintained throughout for the future, he for one was ready to retire most joyfully if his place could be filled more to their satisfaction. Before he sat down, he begged to hand in a report from an unconcerned miner, of undoubted talent and respectability, who had visited Tincroft, and requested that the report of Captain Thomas Treweeke, of St. Ives, be read:—

Tincroft Mines, June 20.—Pursuant to your request, I visited the Tincroft Mines, near Redruth, on Monday last, for the purpose of inspecting and reporting to you thereon. The first object of importance to which my attention was drawn was the 130 fm. level, east of Martin's east shaft, in Highborough, where the lode in the end is from 4 to 5 ft. wide, worth from 12*l*. to 15*l*. per fm.; the driving of this end 26 fms. further will reach the limits of the sett. The character, size, and value of the lode in the 142 end is very similar to what it is in the 130, is extended to within 10 fms. of the same point, and 36 fms. from the limit above referred to; over this level, behind the end, there is 30 fathoms in length of unwrought mineral ground, and as many more over the back of the 130—together 60 fms., and about 20 fms. high, worth from 8*l*. to 10*l*. per fm., probably a considerable deal more; the lode occasionally expanding to an immense width, and increasing greatly in value. The unexplored ground between the points at which the 130 and 142 ends have been driven and the boundary, most probably will be found still more valuable, the lode immediately over in the 120 and above having been rich. The 142 fathom level is extended west from the engine-shaft 40 fathoms, mostly through unproductive ground, and is still poor: at this point it is purposed to drive a cross-cut south to intersect Chapple's lode, thence west to the downright shaft, or so called, and thence westward to explore the rich mineral ground on this and Grout's lode. Between the said level and 120 from Martin's east shaft, a cross-cut in the same level has been driven about 55 fms. south, towards Dunkin's lode, to intersect which there are a few fms. more to drive; and having nowhere been seen below the 100, I am impressed with a belief that the speculation is a good one. The 155 fathom level is extended east from the engine-shaft about 60 fms., and has seven or eight more to come up with the rich tin and copper ground gone down in the bottom of the 142, or the western end of the leading tin and copper deposit on this lode hereabout; the engine-shaft is being sunk below the 155, on the same lode, which is divided into two or more parts, frequently mineralised, but accompanied by ground unfavourable for sinking. Notwithstanding the sinking of this shaft, a sump is decidedly necessary, inasmuch as it is from this locality the mineral ground before alluded to in the deeper levels must be reached. The downright shaft falls in with Chapple's lode in the 110, afterwards sunk on it nearly to the 120. The end coming west from the engine-shaft, on the said lode, and in the same level, has about arrived at the same place, in which the lode is worth full 15*l*. per fm., where a communication is about being effected; this lode was cross-cut to from the Highburrow in the 120, similar to that referred to in the 142, which led to the discovery; this shaft must be continued down to the 142 to meet the end coming west from the engine-shaft, as before noticed; the accomplishment of those objects will be a great acquisition to the mine, as it will facilitate the discharge of stuff so much wanted as well as the investigation of two good lodes (Grout's and Chapple's). The 100 east from about this shaft is extended 15 fathoms on Chappie's lode, and partakes much of its good nature, worth from 8*l*. to 10*l*. per fm. The 100, 90, 80, and 70 fm. levels respectively are extended west on this lode several fms. each, having passed through a great length of excellent tin and copper ground. The backs over the different levels are being worked on tribute, and are yielding an abundance of ore. At a certain distance from this shaft Grout's and Chapple's lodes split or divide it, as it were, the former making itself away north of the other, almost regularly, from 10 to 12 ft. wide, and frequently more; the latter seldom so large, but the ore is much richer. Recently on Chapple's, west from where the two lodes diverge in the 80, a valuable discovery has been made, where there are three pitches being worked at a tribute of about 1s. 6d. in 1*l*. The same lode, a few fms. further west, and 2 fms. below the 70, is almost as good, and from an extension of those levels west on this, as well as on Grout's lode, and the bringing on of the deeper levels from the downright shaft, there is much prospect of establishing permanent success; at all events, whatever the discovery on this lode in the 80 and above may turn out to be, it cannot now be regarded otherwise than a very important one.

North Tincroft engine-shaft is sunk below the 110 about 7 fms., where the lode is small and unproductive. The 110 is extended west therefrom about 18 fms., the first 12 fms. through good ore ground, and, as far as I can judge, will be worked to the level over, at from 7s. to 8s. in 1*l*.; the lode in the present end is not so good, but evidently indicates its near approach to a good lode of ore gone down below the 100 and 90 fm. levels, from 45 to 50 fms. in length; the 110 is extended east to a cross-course, or about 20 fms., mostly through a good copper lode; at least two thirds of the ground between this and the level above will be taken away at from 4s. to 6s. in 1*l*., the ore being rich. I fancy this ore is disposed to incline itself east, an exception to what I generally observed in the mine; if such be the case, it augers well for driving the 120 in the same direction. The 100 is driven west 70 fms. from the shaft, the first 10 through poor ground, the remainder through a lode varying from 4 to 12 ft. wide, the greatest portion of which, between this and the level above, will be excavated by tributers, at from 4s. to 6s. 8d. in 1*l*., and the lode in the end at this moment is yielding 5 tons of copper ore per fm., worth from 25*l*. to 30*l*. Beyond this place about 15 fms. there is a winze sicking below the 90, in which the lode is represented as being much better. I was disappointed in not seeing it, the water by some means being let in; judging, however, from the piles of copper at the surface made ready for market, I should say the lode is rather under than over valued, and further on for many fms. I believe it to be fully as good; and the back over is producing large quantities of good ore at a moderate tribute. The lode in the 100 fm. level east has not been so good as in the opposite direction, although in some places, particularly just past the cross-course, it opened to an immense width, and has yielded many valuable parcels of ore; this level is extended east to Willoughby's shaft, and 20 fms. beyond; the lode in the end is orey, which leads me to suppose it is near a long run of good copper ground gone down in the bottom of the 90 over this, and the 90 fm. level pitches are now being worked at from 10s. to 12s. in 1*l*.; there are also pitches being worked over the 80 and 70 fm. levels, at about the same tributes. Although my glance at this section of the mine may be considered but a transient one, I am fully satisfied that it is, and will long continue to form, a very valuable portion of the same. The same observation applies to the south mine.

The mines, as a whole, I consider are in a healthy state, and should have been glad, if time had permitted, to have been somewhat more minute in my examination, and explicit in my report, which probably would have given more satisfaction, especially in reference to the correctness of such a statement. I am sorry I could devote but a short time only to the ascertaining of the value of the ores discovered; this, to be correctly done, would occupy some weeks. From the few estimates I made, I find, however, there are upwards of 60,000*l*. worth of ore discovered, and the ground which I had not much opportunity of examining in different parts of the mine will yield, there is no doubt, several thousand pounds worth more, besides many thousands in immediate prospect. The management and working of the mines have been good, which is very conspicuous, I should say, to every impartial observer. The efficiency of the person who has had the conducting of operations generally, both at the surface and underground, is very apparent throughout the mine, perseverance and industry alone having raised the concern from a state of poverty to the proud position of which the next copper sale will furnish a satisfactory proof.

Mr. JOHNSON stated that on his recent visit he made a point to inquire as to the present value of ore discovered, and found it to be nearly 90,000*l*. worth, two-thirds copper and one-third tin; one quarter part of the tin would not be worth taking away at the present price, but at a small advance it would. Capt. Floyd joined him in estimating that the ore returned would realise 5*l*. per share, and the stock nearly 3*l*.: together, 8*l*. He merely mentioned this to the meeting, for he could safely be upon oath he had not sold a share in the mine during the last five years; neither had his co-directors. Mr. Grout had done so upon retiring. Character was more dear to him than life; he considered his had been unjustifiably assailed, and that he had, with the other members of the board (who held upwards of one-half of the mine), been unfairly dealt with. It was impossible for them to receive such a report and answer it off hand, and they should decline attempting it.

Mr. BIRDSKYE stated that the opinions of miners were as widely different as could possibly be; they generally had their favourite mines or localities to contend for. He had known them to condemn the best of mines, and uphold the very worst by this means. Captain T. Richards as good as condemned Carn Brea, and it had since divided a profit of 200,000*l*. He had been similarly mistaken in his judgment and opinion elsewhere, as doubtless he would be found to be at Tincroft; it would, therefore, be a suicidal act were the meeting to receive his judgment as the final one, while there were such impartial men as Capt. John Richards, and many others of greater experience and longer standing, who could be called in; he would, therefore, at once propose that three such disinterested practical miners be requested to furnish their report of the property.

Mr. GARRARD acknowledged himself to be but a young miner. He had recently visited the mines with Mr. Johnson, where he found everything apparently in good order; and considering they had a man of his great experience with them to direct affairs, and such a talented and practical miner as Captain Floyd to see them carried properly into effect, they had better rely entirely on their united judgment, especially as mining opinions seemed to differ as much as any other, confirming the old adage "that every crow thought its own young the whitest."

Mr. FIELD rose to propose that the meeting adjourn. He felt bound to declare that the report was worded in intemperate language, and loaded with unfair inferences, respecting the acts of those who direct and manage the concern—none of which could be satisfactorily borne out by facts. This, with the inconsistent report of the value both of ore and machinery, were such that the report must be overthrown as wholly unsupportable. The discussion, however, had led to satisfactory results. The mine had clearly been proved to have been wrought in a most judicious and perfectly fair manner, and not "underhand" as represented—the evidence of which outweighed all the committee had exhibited to them; and, as regards the accounts, he concluded by saying he had himself most carefully examined them with the bookkeeper, and was bound to declare himself perfectly satisfied that they had been kept correctly, and were not falsified or cooked. In a few instances, the estimates made had not been perfectly realised, but that was all; therefore, as regards the re-

port, let them put an extinguisher upon it. If he could feel there was any truth in the report, he should be the first to hold up his hand to receive it; but feeling on the contrary, he begged to submit the following resolution:—

That the report of the Committee of Investigation, giving in the opinion of this meeting a most erroneous view of the state, prospects, and management of the mine, and also having entirely failed to substantiate the grave charges therein made against the directors, this meeting do now adjourn.

Mr. T. WATSON proposed that a day should rather be named when the directors would be ready to reply to the various points in question. He moved, therefore, that the report be received for that purpose, which, being seconded, was lost, only half-a-dozen hands being held up for it.

The CHAIRMAN said: I think Mr. Johnson's explanations already given to-day must be all that we shall offer on the subject.

Mr. P. STAINSBY said that hitherto they had sometimes been blamed—not for concealing or falsifying papers, but for showing too many of them—viz., private letters.

Mr. TYRIE rose to second the resolution, which was immediately carried, and the meeting adjourned *sine die*.

New Patents.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

J. Hick, of Bolton-le-Moore, Lancaster, engineer, for certain improvements in steam-boilers or generators.

W. Dickinson, of Blackburn, Lancaster, machine-maker, and R. Willan, of the same place, mechanic, for certain improvements in machinery or apparatus for manufacturing textile fabrics.

T. W. Lord, of Leeds, York, flax and tow machine-maker, and G. Wilson, director of the flax-works of John Fergus, Esq., M.P., of Prenlaws, Fife, North Britain, for a machine to open and clean tow, and tow waste from flax and hemp and other similar fibrous substances, and an improved mode of piecing straps and belts for driving machinery, and a machine for effecting the same.

A. Albright, of Birmingham, manufacturing chemist, for improvements in the manufacture of phosphorus, and in the apparatus to be used therein.

T. S. Bale, of Caludon-place, Stafford, china manufacturer, for certain improvements in the method of treating, ornamenting, and preserving buildings and edifices, which said improvements are also applicable to other similar purposes.

J. M'Nab, of Midtownfield, Renfrew, North Britain, for certain improvements in stretching and drying textile fabrics or materials, and in the machinery or apparatus employed therein.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

W. Pearson, Maryport, cooking apparatus or caboose.—J. Walker, City-road, double-acting screw press.—P. Nicholas, Thann, France, machine for engraving rollers.—J. Hall and Son, Lombard-street, safety stopper and measure for powder canisters and flasks.—A. Saxon, Middleton, Lancaster, throstle bobbin.—E. Leach and Sons, Rochdale, adjustable traverse slot.—W. Mabon, Manchester, double angle iron for the cup and dip of gas-holders.—J. Strutt, Belper, Derbyshire, a cheese-turning machine.—*Mechanics' Mag.*

IMPROVEMENT IN WAFERS.—Mr J. H. Brown, of Putney, has taken out a patent for certain improvements in the manufacture of wafers.—Mr. Brown's wafers are composed of very thin sheets of metal or metallic alloys of any description, and either plain or ornamented by gilding, varnishing, or lackering, coated with an adhesive compound. The compound which the patentee employs, consists of 16 parts strong glue, four parts clean gum arabic, five parts treacle or other saccharine substance, three parts spirits of wine, one part camphor, one part virgin wax, and 12 parts distilled water. These ingredients are heated in a closed vessel by means of a sand bath, and maintained for about eight hours at a temperature of 210° Fahr.; then filtered and diluted to fluidity with water (in which alum has been dissolved, in the proportion of one part to every 15 parts water), being kept during the time just below the boiling point. The sheets of metal to be coated are passed between a pair of metal rollers, one having a plain polished, and the other a slightly-roughened surface, and after the composition has been applied to the roughened side of the sheets, and allowed to dry, they are cut or punched into wafers of any form or pattern.—*Claims*: 1. The composition for rendering metals or metallic alloys adhesive for the purpose of securing letters and envelopes, whereby they are rendered impervious to damp and unaffected by wet, which is not the case with sealing-wax, wafers, and adhesive compounds at present in use.—2. The employment of machinery for roughing the surface of the sheets of metal and any other compound, in addition to that above described, for rendering them adhesive.

TELEGRAPHIC COMMUNICATION IN NORTH WALES.—The communication between Liverpool and Holyhead, by means of the electric telegraph, is now complete and in full operation, *viâ* Chester. There requires now but the laying down of the long-projected submarine telegraph between the island of Anglesea and the sister country fully to complete the chain of telegraphic communication between Dublin, London, and the great towns of England. It is proposed, on the completion of the south Wales Railway, to adopt the system on that line, and finally to extend it to the Pembrokeshire coast. By these means both the north and south of the principality would be brought into immediate intercourse with England.

GLAMORGANSHIRE CANAL NAVIGATION.—The COMMITTEE of the Company of proprietors of the GLAMORGANSHIRE CANAL NAVIGATION are desirous of ENGAGING an OUT-DOOR SUPERINTENDENT of the WORKS of the said Canal, at a salary not exceeding THREE HUNDRED POUNDS per annum, with the use of a House belonging to the Company. 57

The duties which will be required will consist in looking after the maintenance, repair, and improvement of the Locks, and all other works of the Canal, and the facilitation, in every way, of an increasing traffic; and parties tendering services will be expected to have had considerable experience in Canals, and to be capable of applying to the Glamorganshire Canal the latest improvements in Locks, and all other matters connected with Canal Navigation and the shipping of Coal for export from the Canal.

It will not be required of the Out-door Superintendent to take any part in the accounts of the Canal, or the payment of wages, or the purchase of any description of material for the use of the Canal, but he will be expected to keep a correct account of the time and occupation of the men employed under him, and to devote his services exclusively to the Company, and never to be absent without permission.

No perquisites or privileges beyond the house and salary will be allowed, and good testimonials as to character, experience, and utility, will be required.

The Committee will meet on Thursday, the 31st inst., at the Cardiff Arms, Cardiff, at Eleven o'clock of the forenoon, to receive applications; and in the meantime any further information may be obtained of Mr. John Forrest, Navigation House, near Cardiff.

WILLIAM CRAWSHAY, Chairman of the Committee.

PURE PATENT WHITE ZINC PAINT, FROM THE VIEILLE MONTAGNE ZINC MINING COMPANY.—This Company having become proprietors of all rights and patents of the late Patent White Zinc Company, in France and Belgium, is prepared to furnish, on a large scale, the WHITE OXIDE OF ZINC, in a pure state, and of a quality which can only be manufactured with the zinc from the mines in Belgium. PATENT WHITE ZINC PAINT is superior, in every respect, to White Lead Paint. It is entirely free from all poisonous influences, and is unaffected by sea water, sulphuretted hydrogen, or any gases; besides, it preserves its original colour, which White Lead Paint does not. WHITE ZINC PAINT causes none of those ravages invariably engendered by White Lead upon the human frame; neither painters' cholic or paralysis, &c., &c., to which dangerous complaints the workmen who manufacture and use it are liable, and to which persons who inhabit newly-painted apartments are also liable. A spurious article having been introduced in the market, under the name of White Zinc Paint, the public is cautioned against it, because, when adulterated, it becomes a very inferior paint, instead of a first-rate one. 53

For further particulars and prospectuses, apply to Mr. H. F. SCHMOLL, General Agent for England and Scotland, at the Company's Offices, 12, Manchester-buildings, Westminster-bridge; and for supply of materials and prices, at Messrs. CHARLES DEVAUX and CO., 62, King William-street, City.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 54

BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 20th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA—On the 20th and 29th of every month. CONSTANTINOPLE—On the 29th of the month. ALEXANDRIA—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

LIVERPOOL COLLEGE OF CHEMISTRY,—Recognised by all the London Medical Examining Boards, and the Apothecaries' Hall of Ireland

Professor—Dr. SHERIDAN MUSPRATT, F.R.S.E., &c. 55

ANALYSIS and ASSAYS, sent to the above address, will receive IMMEDIATE ATTENTION.—Fees for Analysis, and for Students working in the Laboratory, may be had on application at the College.

Apothecaries' Hall, London, May 1, 1851.

At a Court of Examiners, held this day, it was resolved,—That the Royal College of Chemistry, London, and the College of Chemistry, Liverpool, be for the future recognised as Schools of Practical Chemistry, subject to the Regulations of this Court.

(Signed) HENRY BLATCH, Secretary.

EXHIBITION OF 1851.—T. P. AUSTIN, proprietor of PEELE'S COFFEE-HOUSE, FLEET-STREET, begs respectfully to inform his friends and the public generally, especially those interested in the forthcoming GREAT EXHIBITION, that he has recently NEARLY DOUBLED THE SIZE OF HIS ESTABLISHMENT, which will enable him to afford increased comfort and convenience to those honouring him with their patronage. The FILES OF NEWSPAPERS and PERIODICALS, for which Peele's Coffee-house is so celebrated, containing all the reports of the Royal Commissioners, will be available to those visiting this establishment. 56

*** The *Mining Journal*, in addition to all Publications connected with the Mining Interests, are regularly filed.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—At a HALF-YEARLY GENERAL MEETING of the proprietors of the Association, held at the offices of the company, No. 26, Austinfriars, this 15th day of July, 1851, RUSSELL ELLICE, Esq. (Chairman), in the chair. 57

The advertisement convening the meeting having been read, the following report was read:—

REPORT:

This is the season when the directors are enabled to lay an audited account of the produce of the mines for the preceding year before the half yearly general meeting of the proprietors; and they do so now with much pleasure, as they have no doubt that the account will be found satisfactory—the nett profits of the year being nearly as great as those of the year which preceded it, though there was a small falling off in the quantity of ore raised; that of 1849 having been 19,772 tons, and that of 1850, 17,902 tons. But to compensate for that difference, it is pleasing to the directors to be able to state that the quality of the ore of last year—that is, its produce per assay—was materially greater than that of 1849; the average produce of last year having been 19¼ per cent. against 17⅛ for 1849.

The produce of the mines for the first five months of the present year exceeds that of the first five months of 1850 by 508 tons; and, though there has lately been a slight falling off, they have reason to hope that the general produce for the present year will be equal to the last. The last mining report received, being for the month of May, is now laid before you.

With the balance of the undivided profits of the account about to be laid before you, and part of the accruing profits of the present year already in hand, the directors now declare a dividend of 4*l.* per share, exclusive of income tax, payable on and after Thursday, the 24th instant.

Agreeably to what was mentioned in the report of January last, the contract with Mr. Bankart expired in April; and though its tendency, with some similar causes, has no doubt been advantageous in bringing about the present more equitable adjustment between the prices of the ore and the prices of copper, it has been attended with some loss; and the directors have declined to renew it, or to engage to recommend its renewal to the proprietors. They have, however, acceded to an offer made by Mr. Bankart to continue to supply him with a limited quantity of ore at a reduced charge for smelting, till the opinion of the proprietors of this half-yearly general meeting could be taken. The experiment having been originally undertaken under your authority, the termination of it is now submitted for your decision.

Since the last meeting, the directors have to regret the loss of their valuable and much esteemed colleague, Sir John Pirie, Bart.; and, in order to supply the vacancy occasioned by his lamented decease, they gave the usual public notice; and no other gentleman but Mr. Francis Mills having offered himself as a candidate, a ballot for his election, as required by the Deed of Settlement, will be held at the close of this meeting.

It was then moved, seconded, and carried unanimously:—

That the report and accounts now read be received and adopted.

It was also moved, seconded, and carried unanimously:—

That the cordial thanks of the meeting are hereby given to Russell Ellice, Esq., chairman, and the other directors, for their zealous and successful labours on behalf of the company.

The Proprietors then proceeded to the ballot, when Francis Mills, Esq., was elected unanimously a director of the company, in place of the late Sir John Pirie, Bart.

PARKEND COAL COMPANY,—*ON THE COST-BOOK SYSTEM.*—In 10,000 shares, of £2 10s. each. 58

MANAGING COMMITTEE.

H. STOCK, Esq., Camden Town.
C. L. WEBB, Esq., 2, New-square, Lincoln's Inn.
W. PROTHEROE, Esq., Blakeney, Gloucestershire.
Captain W. O'BRIEN HOARE, R.N. (Inspecting Commander of Coast Guard), Shales Lodge, Hants.

AUDITOR—James Hutton, Esq. (Public Accountant), Moorgate-street.
ENGINEERS—John Atkinson, Esq. (Her Majesty's Deputy-Gaveller of the Forest of Dean). Joseph Cooksey, Esq., West Bromwich, Staffordshire.
SOLICITORS—Messrs. Vincent and Randall, 8, Castle-street, Holborn; Messrs. Edwards and Freestun, Stroud.
BANKERS—The Commercial Bank of London, Lothbury; the County of Gloucester Bank, Gloucester.
SECRETARY—J. A. Joseph, Esq.

OFFICES,—3, SISE-LANE, BUCKLERSBURY.

This company is formed for the purpose of developing more extensively the Parkend Collieries in the Forest of Dean, Gloucestershire, which have been for several years in a profitable state of working.

The Parkend Coal is consumed in large quantities at Gloucester, Cheltenham, Bristol, Bridgewater, Cork, and many other English, Irish, and foreign ports; with a rapidly increasing demand along the entire line of the Great Western Railway.

The Lessees of the Parkend Iron Furnaces are bound by contract (of which 17 years are unexpired) to take a minimum quantity of 10,000 tons per annum, at a nett profit of 1s. 6d. per ton; they are, however, taking an average quantity of 15,000 tons per annum, which is likely to be still further increased. Of this contract the present Company will have the full benefit.

According to the reports of eminent engineers (which are to be seen at the office), there remains unworked—the whole of which can be gotten without any additional expense of machinery—

	Acres.	Tons.
Parkend High Delf	240	720,000
Smith	500	1,000,000
Starkey	500	1,000,000
Total		2,720,000 tons.

72,000 tons per annum can be raised from the present shafts; the above seams, therefore, at this rate, would be exhausted in about 30 years, but by working the lower seams the duration of the Colliery may be prolonged indefinitely.

The cost of getting and delivering this Coal at Lydney (the analysis of which may be seen at the office) is 6s. per ton.

It has been ascertained that the Government has received from this Colliery, during the years 1845 to 1850, an average of royalty on upwards of 76,000 tons per annum, the price of which at Lydney has ranged, during the last three years, from 8s. 6d. to 10s. 6d. per ton; but by taking the very lowest price—say, 8s. 6d., the profit would be 70,000 tons per annum at 2s. 6d. per ton, from which, deducting royalty and expenses for management, there remains a nett profit of 1s. 3d. per ton, or £4375 per annum, being about 18 per cent. on the capital required.

The approaching opening of the South Wales Railway cannot fail to increase considerably the above profits, especially as all the calculations for outlay and cost have been taken at the maximum rate, and the selling price at the extreme minimum.

The stock and plant comprises seven winding and pumping engines, with boilers and engine-houses, one water-wheel, 300 fathoms of pitwork, 250 railway waggons, 450 tons of tram plates, 130 pit carts, waggons, smiths and carpenters' shops, manager's house and offices, and 30 labourers' cottages.

With a full conviction, therefore, that the Company will at once enter upon extensive works already opened, with former connections, doing a lucrative and established trade, this concern is offered to the public, not as as a speculation, but a s an investment certain of producing great and immediate profit to the shareholders.

The capital proposed to be raised will be appropriated to the purchase of the goodwill, plant, and stock, to be taken at a valuation; this, it is estimated, will require £16,000, leaving £9600 for working capital.

In the event of the required capital not being obtained, the whole amount subscribed will be returned without any deduction.

Any further information desired will be furnished on application to the Secretary, at the Office, where the different Engineers' reports may be seen.

A considerable number of the shares are already taken; applications for the remaining number may be made not later than July 30, in the annexed form, at the offices of the Company, or to any of the following parties:—To the Solicitors; Messrs. Sims and Hill, stock and sharebrokers, 3, Bartholomew-lane; Messrs Lane and Perry, stock and sharebrokers, Waterloo-street, Birmingham; T. K. Thomas, Esq., stock and sharebroker, Bristol; Messrs. Dickenson and Co., Newcastle-on-Tyne; J. F. Hughes, Esq., 5, Westgate-street, Gloucester.

FORM OF APPLICATION.

To the Directors of the Parkend Coal Company.

Gentlemen,—I request you to allot me shares in the above Company, on the Cost-Book Principle; and I hereby undertake to accept such shares, or any less number that may be allotted to me, and to pay the sum of £2 10s. per share; and to sign the Cost-Book when required so to do, and to abide by the rules and regulations of the same, on the understanding that, should the capital required not be obtained, the whole amount is to be returned without any deduction.

Name.....
Address.....
Description.....
Reference.....
Address of Referee.....

ST. AGNES BEACON TIN AND COPPER MINE, CORNWALL.—Capital £3625, in 2500 shares, of £1 1s. each. 59

ON THE COST-BOOK SYSTEM,

And in conformity to the Stannary Laws; held under the Duchy of Cornwall for 21 years at 1-15th royalty.

To be governed by a committee, selected by the shareholders, in preference to a self-constituted board of directors.

The parties bringing this concern before the public can safely refer to any of the mining agents around the parish of St. Agnes; they do so rather than offering any recommendatory reports they might themselves produce. The locality was described in the *Ancient History of Cornwall* half a century ago, and also in last week's advertisement.

The workings since have been on the course of the Bolster lode, at the adit level, through some fathoms of a shoot of ironstone; the present end west is driving in a fine channel of country, and showing good tin; a new shaft has been sunk down upon it from surface. Eastward the lode is 4 feet wide, containing branches of tin, mixed with copper and mundic. About 25 fathoms west there is a cross-course, by driving upon the run of which nine lodes will be cut through and explored east and west. In the adjoining and parallel mines great quantities of metal have been risen at similar intersections of the various lodes near the same cross-course.

About £3000 worth of work has already been completed, which this company avail themselves of. The present party, few in number, have expended one-half that sum, and only receive that amount (in shares and money), asking no premium; nor is there any debt or liability upon the concern. It has been a private adventure. A sufficient number of labourers are at work in the adit, making preparations for a larger body of them, which will be employed as soon as the present arrangement for increasing the capital is effected.

No steam-engine will be necessary, or other expensive machinery; the additional capital now required is only £1000. A considerable portion of the shares are already subscribed for, the remainder will be distributed to the earliest respectable applicants, who will be entitled to their full proportion of all the profits that may be derived from the workings from the date hereof.

Applications, in the usual form, with references, will be received until the 26th inst., by F. W. Pike, Esq., 26, Bedford-row; Mr. E. O. Parkinson, 9, George-yard, Lombard-street; and Mr. John Morgan, sworn broker, 9, Copthall-court, London,—where plans and reports may be inspected.—Dated July 9, 1851.

START BAY SLATE COMPANY—STOKENHAM, SOUTH DEVON.—ON THE COST-BOOK SYSTEM. 60

Capital £8000, in 4000 shares, of £2 each.—Deposit £1 per share.

The Start Bay Slate Quarries possess every advantage that can be desired, both in the quantity and quality of the slate, and the facility of shipment.

Application for prospectuses (with the names of the directors), and for the remaining shares, to be made to the secretary, Mr. Joseph Maitland, 12, Copthall-court; to Mr. Nicholson, solicitor, 90, New Bond-street; to Mr. Archibald Hudson, 4, Angel-court, Throgmorton-street; or to Mr. R. E. Little, 11, Warnford-court, Throgmorton-street.

WEST WHEAL FRIENDSHIP MINE.—This MINE is situate in the parishes of BRENTOR and TAVISTOCK, in the county of DEVON, and is held under a lease from Wm. Batten, Esq., 16 years of which are unexpired, and a new term promised for 21 years from the present time, at 1-15th dues. The extent of the sett on the course of the lodes is about 600 fms. from east to west, and 200 fms. from north to south, is within four miles of canal communication with the quays on the River Tamar, and three-quarters of a mile west of the Great Wheal Friendship sett; and there is every reason to believe the lodes are the same which have been worked in that mine nearly 60 years, and have rewarded the adventurers with dividends amounting to £300,000. The stuff on the burrows, now to be seen and daily bringing up, precisely resembles the produce of the old mine, so much so that even practical miners can discern no difference. 61

The operations in West Wheal Friendship have been carried on by the present company during the last five years, at a cost of £5000, in clearing up the old adit 120 fms. long, opening a lobby to carry off the water from the wheel, erecting a 36-feet wheel, 4 feet breast, launders, strong connecting iron rods, pumps, whim and other machinery, sinking a shaft, driving levels, &c.; erecting a counting-house, smiths and carpenters' shops, &c.—the whole of which are paid for, and the mine free from all debts and liabilities.

A shaft has been sunk 53 fms., and the following levels driven on the course of the great north lode, which is of the most promising character, and exceedingly large, being at the adit level 14 feet wide, and which has been extended 20 fms. west. The 33 fm. level has been driven 20 fms. west and 6 east, and shows considerable improvement from the adit level. In the 43 the lode has only been cut into, and the water issuing therefrom found to be more than the machine could clear. A cross-cut has been driven in the 53 to within 6 or 8 ft. of the lode; but from the large quantity of water issuing from it in the 43, we are unable to proceed in the bottom levels, and without the aid of steam-power (which will enable us to sink to still lower levels hereafter), we are at present unable to drive on the levels below the 33; but the water-wheel would still be available as a drawing and stamping machine.

The character of this lode, so far as seen, has been described by all the agents who have inspected it as most promising, consisting of large quantities of mundic, with spar, peach, prian, and occasional spots of ore, and the mundic coated with the oxide of copper.

There are also three other lodes to the south of the Great Mundic lode, and from one of them large quantities of fine gossan appear at the surface, but they have not yet been opened upon.

The captain and miners state their belief that, from present appearances, they cannot be far from a course of ore, and feel confident that if machinery were provided to get the water out from the deeper levels, the adventurers would be amply remunerated; but, alas! the sinews of war are wanting—the present proprietors having already expended so much, are willing to treat with any respectable company or capitalist disposed to join in this promising undertaking for the sale of one-half the mine, or 2000 shares, which they hereby offer for the sum of £2000, and to apply the whole as working capital or common stock, in the erection of a steam-engine, and in the further prosecution of the mine.

In thus offering a moiety of the company's interest to the public, the committee desire the fullest investigation; this not being a speculation merely got up for sale—their outlay, and determination to go on to the utmost of their means on the part of the present company, will exonerate them from that charge; and they will feel pleasure in showing the mine, and affording every information, on application to the purser, Mr. J. Newton, Tavistock.—Tavistock, July 16, 1851.

FFRWD MINE,—Near LLANRHYSTID, nine miles from Aberystwith, CARDIGANSHIRE.—The above work has been driven about 40 yards cross-cut, to carry out the water; and 14 yards driving on the vein, which runs from east to west, with every prospect of proving an excellent speculation as a LEAD MINE. It is but one mile from the sea, and the river runs through the dingle in which it is situated. It is now offered to adventurers upon conditions proposed by the Earl of Lisburne and Pryse Loveden, Esq., M.P.—Specimens of the ore may be seen at the office of the *Mining Journal*, 26, Fleet-street, London; and for further particulars apply to Mr. Wm. Davies, Ffrwd, Llanrhystid, near Aberystwith. 62

TRENAULT LIME QUARRIES COMPANY, 6000 parts, or shares, of £1 1s. each. 63

CONDUCTED ON THE COST-BOOK PRINCIPLE,

Which exempts shareholders from any liability beyond the amount of their shares, and enables them to withdraw at any time by giving notice to that effect.

Prospectuses, containing the Rules and Regulations in full, Maps, and every information, may be obtained at the offices, 30, Bucklersbury. JAMES A. MAY, Purser.

TRENAULT LIME QUARRIES COMPANY.—Notice is hereby given, that a GENERAL ALLOTMENT of SHARES will TAKE PLACE on THURSDAY, the 24th July inst.—Applications for the few remaining shares must be made on or before that day.—30, Bucklersbury, London. 64

TO THE MINING AND SHIPPING INTERESTS.

WIRE AND HEMP ROPES,—MANUFACTURED under PATENT GRANTED TO JAMES B. WILSON,

HAYDOCK ROPE-WORKS, NEAR WARRINGTON. 65

Applicable to SHIPPING, INCLINED PLANES, MINES, COLLIERIES, &c.; as also to WIRE CABLES for SUBMARINE, OVERLAND, and UNDERLAND TELEGRAPHS.

Sizes, with comparative weights and strength, as also price per cwt. or fathom, may be obtained on application to the patentee.

All sizes of wire strands, railway signal lines, flat and round copper rope, lightning conductors, window sash lines, &c.—Warrington, July 5, 1851.

STIRLING'S PATENTS FOR IMPROVEMENTS IN IRON.—1. TOUGHENED CAST-IRON, which is double the strength of ordinary cast-iron, and only 10s. to 12s. per ton extra.

2. ANTI-LAMINATING IRON, for RAILS and TIRES, &c., at an extra price of from 7s. 6d. to 10s. per ton. Also IMPROVEMENTS in the MAKING of WROUGHT-IRON—saving one process to the manufacturer.

The following Iron Manufacturers are duly LICENSED to MAKE the IRON:—

Messrs. BAIRDS'	Gartsherrie, Glasgow.
The CLYDE IRON COMPANY	ditto ditto
The FIRTH IRON COMPANY	ditto ditto
The HERSLEY COMPANY	Tipton, Staffordshire.
Messrs. LLOYDS, FOSTER, & CO.	Wednesbury.
Mr. JOHN WILSON	Dundyvan, Glasgow.

66

AGENTS.

Messrs. W. & J. H. JOHNSON, 166, Buchanan-street, Glasgow, and 20, St. Andrew's-square, Edinburgh.

Further particulars may be obtained on application to the agents; or to Mr. JEE, civil engineer, No. 6, John-street, Adelphi, London.

STIRLING'S PATENT ALLOYS.—RAILWAY CARRIAGE BEARINGS, MILL BRASSES, and all DESCRIPTIONS of CASTINGS, are MANUFACTURED by ALFRED BARRETT, Bishopsgate Foundry, Skinner-street, SOLE LICENSEE FOR LONDON.

BELLS of very superior quality (Stirling's Patent) are also SUPPLIED. 67

NOW READY, PRICE SIX SHILLINGS.

Under the immediate Sanction and Patronage of his H.R.H. PRINCE ALBERT, K.G., Lord Warden of the Stannaries, Chief Steward of the Duchy of Cornwall and Devon, &c.

THE MINING MANUAL AND ALMANACK FOR 1851, Being a Yearly Compendium of INFORMATION on GENERAL SCIENCE, with Tabular and other Statistical Details relating to the MINING INTERESTS.—Compiled and arranged by HENRY ENGLISH, Mining Engineer. 68

London: Simpkin, Marshall, and Co., Stationers'-court; at the office, 25, Fleet-street; and at the office of the *Mining Journal*, 26, Fleet-street.

[A detailed list of the contents will be published in next week's *Mining Journal*.]

UNDER BRITISH AND FOREIGN LETTERS PATENT.

HUTCHISONISED STONE, BRICKS, &c.—TO LAND PROPRIETORS, ENGINEERS, ARCHITECTS, &c.—The SOFTEST STONE, CHALK, GYPSUM, CLAY, SAND, &c., INDURATED AS HARD AS GRANITE—will never vegetate nor disintegrate, being impervious to atmospheric action, &c.

For all Foundations, external and internal Buildings, Docks and Sea Walls, Sewerage, Paving, Decorative and Monumental Works, the HUTCHISONISED MATERIALS are unequalled for durability and low cost.—*(See Testimonials and Prices.)*

PASTEBOARD, SOFT WOOD, and other ABSORBENT MATERIALS, rendered WATERPROOF, and imperishable from weather, vermin, &c. 69

LICENSES GRANTED ON LIBERAL TERMS.

Apply to WM. HUTCHISON, Hutchisonised Stone Works, &c., Tunbridge Wells, Kent.

THE PATENT OFFICE AND DESIGNS REGISTRY.

No. 156, *STRAND* (removed from 210), *LONDON.*

INVENTORS will receive (gratis), on application, the OFFICIAL CIRCULAR OF INFORMATION, detailing the eligible course for PROTECTION of INVENTIONS and DESIGNS, with Reduced Scale of Fees. 70

Messrs. F. W. CAMPIN and CO. offer their services, and the benefit of many years' experience, in SECURING PATENTS and REGISTRATIONS OF DESIGNS, with due regard to VALIDITY, economy, and dispatch—assisted by scientific men of repute.

Also, in MECHANICAL and ENGINEERING DRAWINGS, whether connected with Patents, Railways, or otherwise, by a staff of first-rate draftsmen.

Application personally, or by letter, to F. W. Campin and Co., No. 156, Strand (removed from 210), London.

BY HER MAJESTY'S ROYAL LETTERS PATENT.

THE PROCESS OF ICE BEING MADE IN ONE MINUTE, without the aid of Ice, has elicited from Her Majesty, at the Grand Exhibition, her most gracious approval and unbounded astonishment, by 71

MASTERS & CO.'S PATENT FREEZING MACHINES,

which are now brought to the highest state of perfection; as also are the various MACHINES enumerated below:—

MASTERS'S PATENT FREEZING MACHINE, for making Dessert Ice and Rock Ice from Spring Water, and for Cooling Wine, &c., at a trifling cost.

BUTTER COOLER and FREEZER. ICE PERCOLATING FUNNEL.

ENAMELLED WINE REFRIGERATOR, for Icing Champagne, &c.

MASTERS'S PATENT SHERRY COBBLER FREEZING and COOLING JUG, for producing pure Ice from Spring Water in five minutes, at the cost of 2d., in the hottest climate.—Price 30s. and upwards.

COOLING DECANTER, or CLALET JUG.—COOLING and FREEZING FILTERER.

COOLING CUP, for Surgical purposes, &c. &c. &c.

The PUBLIC is respectfully INVITED to SEE the PROCESS of MAKING ICE, by the above machines, without the aid of Ice—the same process as exhibited by Mr. Masters to Her Majesty, at his Refreshment Rooms, at the Crystal Palace, where 100 quarts of Desert Ice, and large cylinders of Rock Ice are made daily—at Messrs. MASTERS & CO.'S principal DEPOT, 309, REGENT-STREET, adjoining the Polytechnic Institution, London.

MASTERS & CO.'S PATENT SODA WATER and ÆRATING APPARATUS, for charging Water, Wine, Ale, and other Liquids, with pure Carbonic Acid Gas. By this apparatus the purest Soda Water may be obtained at the cost of less than one farthing per glass; and so delicate is the operation, that it may be used in the dining-room. By the addition of the Jargonelle Pear Syrup, manufactured by Messrs. Masters & Co., the most delicious effervescing beverage is produced. Price 30s., and upwards.

N.B.—Syrups from all Fruits, for flavouring Soda Water, making Lemonade, Ices, &c.

Also, MASTERS & CO.'S PATENT ROTARY KNIFE-CLEANING MACHINE, manufactured in six different sizes, to clean and brilliantly polish Six to Twelve Knives in One Minute. Warranted to last many years, and not get out of order.—Price 35s. to 6*l.* 6s.

MASTERS & CO., PATENTEES, No. 309, REGENT-STREET, Adjoining the Polytechnic Institution, London.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
5120	Alfred Consols (copper), Phillack	3	£1 1 to 5th April	£0 6 0 May	16 15	15½ 15¾
1248	Allt-y-Crib (silver-lead), Talybont, Wales	5	— —	0 2 6 ,,	10	
1024	Balleswidden (tin), St. Just	11¼	8 11 to June	0 5 to June	10	
4000	Bedford United (copper), Tavistock Devon	2¾	2 12 to June	0 4 to June	7½ 7¾	7½ 7¼
64	Boscaswell Downs (tin), St. Just	—	750 0 to May, 1849	—	100	
100	Botallack (tin and copper), St. Just	182½	440 0 to 5th April	5 0 to May	205 210	
1000	Bryntail, Llanidloes, Montgomeryshire	2½	0 5 to end June	0 5 to June	16 17	
1000	Callington (lead and copper), Callington, Devon	28	6 0 to Sept., 1847	—	6¾	
1000	Carn Brea (copper and tin), Illogan	15	202 0 to June, 1851	2 0 to June	105	
1024	Chyprase, St. Enoder (tin and copper), Cornwall	3¼	2 6 8 —	—	6¼	
128	Comford (copper), Gwennap, Cornwall	65	— —	—	50	
256	Condurrow (copper and tin), Camborne, Cornwall	20	11 0 —	—	105	
1024	Devon Great Consols (copper), Tavistock	1	224 10 to March	8 0 to May	300 305	
180	Dolcoath (copper and tin), Camborne	252	855 14 to 1847	—	16	
128	East Pool (tin and copper), Pool, Illogan, Cornwall	24½	233 0 to 1843	—	176	
94	East Wheal Crofty (copper), Illogan, Cornwall	125	242 10 —	—	120	
128	East Wheal Rose (silver-lead), Newlyn	50	295 0 to 5th April	15 0 to May	550	
494	Fowey Consols (copper), Tywardreath	40	— —	—	30	
3750	General Mining Company for Ireland (copper)	1¾	35 per cent. to June	10 per ct. ½ year	5¾	
100	Goginan (lead), Cardiganshire, Wales	5	440 0 ,,	—	200	
96	Great Consols (copper), Gwennap, Cornwall	1000	353 6 8 to January	—	200	
119	Great Work (tin), Germoe	100	110 0 to June	7 10 to June	200	
1024	Herodsfoot (lead), near Liskeard, Cornwall	8	— —	0 5 ,,	5 7	
1000	Holmbush (lead and copper), Callington	24	25 0 to Feb., 1844	Feb., 1844	14½ 15½	
1000	Lewis (tin and copper), St. Erth	17	1 0 to 9th Feb.	0 10 to April	20 21	
160	Levant (copper and tin), St. Just	2½	1030 0 to 5th June	5 0 to June	160	
100	Lisburne (lead), Cardiganshire, Wales	75	620 0 ,,	20 0 ,,	700	
20000	Mining Company of Ireland (copper, lead, and coal)	7	7 10 6 to Feb., 1847	7 p. ct. p. annum	4½	4¾
200	North Pool (copper and tin), Pool	22½	195 0 to 4th April	7 10 to June	240	
140	North Roskear (copper), Camborne	10	150 0 to February	2 10 to May	155	
6000	North Wheal Basset (copper and tin)	½	1 1 to 5th April	—	13	
128	Par Consols (copper), St. Blazey	55¾	374 0 —	—	650	
1160	Perran St. George (copper and tin)	21¼	1 15 to June	0 10 to 4th June	40	
560	Providence Mines (tin), Uny Lelant	20¾	11 17 to February	1 0 to May	25	
256	South Caradon (copper), St. Cleer	2¾	250 0 ,,	2 10 ,,	132½	135
256	South Tolgus (copper), Redruth, Cornwall	16	24 0 to 5th June	2 10 to June	160	
248	South Wheal Frances (copper), Illogan	80	95 15 to 10th July	6 0 0 to July	260	
1024	Spearne Consols (tin), St. Just, Cornwall	1¼	3 7 6 to June	0 12 6 to June	9½ 10½	8 9 10½ 11½
94	St. Ives Consols (tin), St. Ive's	80	851 0 to February	5 0 to May	80	
1000	Stray Park and Camborne Vean (copper), Cornwall	15	11 10 —	—	15 15½ 13	
9600	Tamar Consols (silver-lead), Beeralston	4	2 11 to July, 1847	—	4½ 4¾	
6000	Tincroft (copper and tin), near Pool	7	5 17 6 to Sept.	—	7½ 7¾ 8½	
256	Trehane (silver-lead), Menheniot	1¼	24 15 to January	1 0 to May	15½ 16	15½
5000	Treleigh Consols (copper), Redruth	6	1 3 to Oct., 1847	0 5 Oct. 1847	2	2
96	Tresavean (copper), Gwennap, Cornwall	20	4680 15 to 1848	—	220	
120	Trethellan (copper), Gwennap, Cornwall	5	402 10 to 5th April	—	14	
120	Treviskey and Barrier (copper)	130	221 15 ,,	8 10 to May	210	
1024	Wellington (copper & tin), Perranuthnoe	6¼	2 2 6 ,,	0 5 to March	7	
256	West Caradon (copper), Liskeard, Cornwall	20	160 5 to June	2 10 to June	110 107	
512	West Providence (tin), St. Erth	10	— —	—	90	
256	Wheal Basset (copper), Illogan	10½	235 0 to 3d June	10 0 to 3d June	392½	
256	Wheal Brewer (copper), Gwennap, Cornwall	2	5 0 —	—	6¼	
128	Wheal Buller (copper), Redruth	10	142 10 to 5th April	25 0 ,,	1050	
126	Wheal Friendship (copper) Devon	120	2325 10 —	—	120	
4000	Wheal Golden (lead), Perranzabuloe	2	0 10 to March	0 5 to May	7½	
430	Wheal Lovel (lead and tin), Helston	—	4 0 to 5th April	2 0 to June	20	
112	Wheal Margaret (tin), Uny Lelant	79	179 0 to March	3 0 to May	135 140	
512	Wheal Mary Ann (lead), Menheniot	5¼	18 5 to 21st May	3 0 to May 21	60 58	58 59
40	Wheal Owles, St. Just, Cornwall	200	— —	—	235	
240	Wheal Reeth (tin), Uny Lelant	20½	22 10 to February	2 10 to May	87½ 90	
198	Wheal Seton (tin and copper), Camborne, Cornwall	107	190 10 to 5th April	5 0 to April	200	
520	Wheal Trelawny (silver-lead), Liskeard, Cornwall	3¾	26 10 ,,	2 0 to May	56	56 57
1024	Wheal Tremayne (tin and cop.), Gwinear, Cornwall	9¾	5 10 to June	0 10 to June	24 23½	
5200	Wicklow (copper), Wicklow	5	— —	20 p. ct. end Feb.	24½	24 25½

FOREIGN MINES.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
[illegible]00	Alten Mining Company (copper), Norway	14½	3 0 0 to Mar., 1848	—	3	
10000	Brazilian Imperial (gold), Brazil	24½	3 17 6 to Dec., 1844	—	2¾ 3	
12000	Cobre Copper Company (copper), Cuba	40	45 10 0 to Jan., 1851	3l. to January	40½	40½
10000	Copiapo Mining Company (copper), Chili	14	3 3 0 to Oct., 1850	8s. to Oct., 1850	6¾ 6¾ 7	
20000	General Mining Association (iron & coal), Nova Scotia	20	6 10 0 to June, 1851	10s. June, 1851	14	
2700	Marmato (gold), Columbia	2½	2 0 0 to June, 1851	1l. to June, 1851	12	
5051	Mexican Company (silver), Mexico	59½	0 8 6 end of 1846	4s. in 1846		
7000	Royal Santiago (copper), Cuba	10	33 4 0 to July, 1846	—	5	3½
1000	St. John del Rey (gold), Brazil	15	12 17 6 to Dec., 1850	1l. 10s. to June 7	18¾ 18½	18½ 18¾
34174	United Mexican (silver), Mexico ... Av.	28½	1 12 6 to Feb. 1851	7s. 6d. Feb., 1851	2¾ 3	2¾ 2½

Shares.	Mines.	Paid.	Last Price.	Present Price.
1024	Appledore (silver-lead and cop.) St. Ives	2½	3	
940	Balnoon Consols (tin), Uny Lelant	—	3½ 4	
5000	Bargally (lead), Cairnsmore	—	1	
905	Barristown (lead), Carrick	5¾	5	
3650	Bawden (silver-lead) St. Teath	¾	½	
256	Berriow (copper), Liskeard	2½	3 3½	
1500	Bishopstone (silver-lead), Glamorganshire	2½	10	
32	Black Burn, Alston, Cumberland	20	100	
5000	Black Craig (lead), Kirkcudbrightshire	5	5	
8000	Blaenavon (iron), South Wales	50	12½	
1024	Bodmin Consols (lead), Wadebridge	5	5	
5000	Bodmin Moor Consols (tin and copper)	1	5¼ 5¾	
1024	Bodmin Wheal Mary (copper), Bodmin	8	9 10	
6000	Bolenowe	2½	4½	
40	Bolowall and Nanpean (tin), St. Just	—	20	
1024	Borington Park (silver-lead), Plympton	1	5	4 4½
240	Boscean (tin), St. Just	12½	10	10
2400	Bosorn (tin), St. Just	1	2	
1024	Bottle Hill (copper) Plympton	1	1½	
256	Bridford Consols	1½	1	
10000	British Iron, New, regis. (iron)	12	8	
—	Ditto ditto, scrip	10	8	
2000	Bronfloyd (lead)	1	1¼ 1¾ 1½	
2400	Bryn-Arian (lead), Cardiganshire	2	1¼	
107	Budnick Consols (tin), Perranzabuloe	52½	3 4	
812	Butterdon (lead), Menheniott	3½	7	
2000	Bwlch Consols (silver-lead), Cardiganshire	4	4 4½	
1000	Cae-Gynon (silver-lead), Cardiganshire	½	4¾	
4000	Calstock United (copper)	5	5 6	
3000	Cally (copper and lead), Kirkcudbrightsh.	1	1½	
1000	Camborne Consols (copper), Camborne	7	4 5	
20000	Cameron's Steam Coal (coal), Swansea	10	2 2½	
1168	Caradon Great Cons. (cop.), Linkinhorne	7	3	
1536	Caradon Vale (copper and lead), St. Ive	2¾	1¾	2½ 2¾
1000	Carbona (tin and copper), Crowan	5	5	
512	Carn Galver, Morvah	1½	3	
5120	Carn Valley, St. Dennis	1	2	
3000	Carthew Consols (cop. & lead), Wadebridge	4¾	6	
1056	Carvannall (copper), Gwennap	3	16 15	
2000	Cassandra Anne (lead & cop.), Stoke Clim.	5	5¼ 6	
200	Cefn Bruno (lead), Cardiganshire	13	54	
5000	Cefn Gwyn (silver-lead), Cardigan	1	1½	
1024	Clijah and Wentworth (tin & co.), Redruth	1½	5	
2510	Cook's Kitchen (copper and tin), Illogan	15½	7½ 5	
1000	Copper Bottom (copper), Crowan	7	8	
900	Court Grange (silver-lead), Cardiganshire	10	12	
211	Craddock Moor (copper), St. Cleer	29	9½	
1600	Craig-y-Mwyn (lead), Llanrhiadr, Mont.	8½	10½	
256	Crane and Bejawsa (copper), Camborne	20	30	
1000	Cwm Daren	1	3	
1000	Cwm Erfin (lead), Cardiganshire	6	3½ 4	
2000	Cwm Sebon	—	4	
128	Cwmystwith (lead), Cardiganshire	60	100	
2000	Cyfannedd Fawr (lead), Lanegryn	½	½	
3000	Dalrhiew (copper and lead), Brecon	1½	10	
1000	Daren (silver-lead), Cardiganshire	2	7	
7100	Derwent (silver-lead), Durham	10	3	
5000	Devon Consols North (cop.), Lamerton	2½	4	
4160	Devon and Courtenay Consols (copper)	1¾	1½	1½ 1¾
768	Devon Great Tincroft, North Bovey	¾	6	
1000	Dhurode (copper) Ireland	2	5	
672	Ding-Dong (tin), Gulval	5	7 8	
4000	Dolfrwynog (copper), Merioneth	½	½	
2560	Drake Walls (tin and copper), Calstock	6½	5	
128	Drift Moor (tin), Sancreed	1	1¼	
1536	Duke of Cornwall (copper), St. Winnon	1	2	
3000	Dyfngwm (lead)	10	10	
1024	East Balleswidden (tin), Sancreed	2	2 2½	
256	East Basset (copper) Redruth	10	17	
2500	East Birch Tor, (tin), near Ashburton	3	3	
2048	East Boringdon Park, Plympton	½	½ 1	
1024	East Buller (copper), near Redruth	3	4½	3½ 4½ 4½
128	East Carn Brea (copper), Redruth	4	3	
2048	East Crowndale (tin), Tavistock	7¾	3	
300	East Daren (lead), Cardiganshire	13	30	
256	East Godolphin (copper), Crowan	17½	21	
4000	East Gunnis Lake Junction (copper)	½	2	
256	East Seton and Wheal Maude, Redruth	4	1¾	
9000	East Tamar Consols (sil.-lead), Beerferris	1½	1	
256	East Tolgus (copper), Redruth	4	10½	
1000	East Trescoll	1	2½ 3½	
256	East Tywarnhayle (copper), St. Agnes	14	5	
256	East Wheal Frances (copper), Illogan	6½	8	
2048	East Wheal George (cop.), Walkhampton	1	10	
2048	East Wheal Josiah (copper), Tavistock	1¾	¾	
512	East Wheal Leisure (copper)	9	18	
1024	East Wheal Margaret (tin and copper)	½	1¼ 1½	
3000	East Wheal Rashleigh, Lanreath	2s	3s 6d	
1000	East Wheal Reeth	1½	1½	
4000	East Wheal Russell (copper), Tavistock	8s 6d	5	5
1280	Esgair Llee Llanfihangel-y-Croythin	4½	5½ 6	
1024	Exmoor Eliza (copper), South Molton	4½	3	
6000	Forest (copper and silver-lead), Devon	1½	1	
1024	Freidd Llwydd Mines (lead)	1½	3½	
12000	Gallt y-Maen (silver-lead), Merioneth	2½	3	
2560	Garras (silver-lead), near Truro	5½	2¾ 3	
5000	Garreg (lead), Flint	—	1½	
1000	Gelli-rei-vin (silver-lead), Cardiganshire	1	5	

Shares.	Mines.	Paid.	Last Price.	Present Price.
2500	Georgia Consols (tin), St. Ive's	2½	7 7½	
256	Gonamena (copper), St. Cleer	46	12	
243	Grambler and St. Aubyn (copper)	84	34 35	
6500	Great Bryn Consols (copper and tin)	1	1	
2000	Great Cowarch (silver-lead), Merioneth	2	3 3½	
11000	Great Polgooth (tin), St. Austell	3	3½	
1024	Great Sheba Consols (tin and copper)	6	5 6	7½
1024	Great Wheal Alfred, St. Erth and Phillack	4	4 4½	
5120	Great Wheal Baddern (tin and silver-lead)	2	5	
5000	Great Wheal Martha (cop.), Stoke Clims.	—	¾ 1	
512	Great Wheal Rough Tor Consols (copper)	29	20	
6000	Growa Slate Company, Camelford	5	5	
1026	Gustavus Mines (copper), Camborne	6½	6	
512	Hawke's Point (copper), Uny Lelant	8½	3½ 4	
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	7½	6	
6000	Heighston Down Con. (copper), Calstock	2¾	1	
32	Helvellin Mining Company, Westmoreland	20	30	
1500	Hennock (silver-lead), Hennock	2¼	2	
10000	Hibernian (copper) Ireland	12½	¾	
20000	Kenmare and West of Ireland (copper)	1	2	
1900	Keswick (lead), Portinscale, near Keswick	11	2 3	
3300	Kilbricken (silver-lead), Clare, Ireland	3	4¾ 5	
1024	Kingsett and Bedford (lead and copper)	4¾	2	
786	Kirkcudbrightshire (lead), Kirkcud.	9¾	4	4 4½
1024	La Min (Gwinear), tin and copper	3½	6¾	
1742	Lamherooe Wheal Maria (copper & tin)	12	12	
5000	Lampen Consols (copper), St. Neot	1	1	
252	Lanarth Consols (copper), Gwennap	4	5 6	
256	Lelant Consols (tin), Uny Lelant	57	22	
13000	Llwynmalees (lead), Cardiganshire	1	1	
3600	Llynvi Iron (iron)	50	50	
5000	Low's Patent Copper Company	7	10	
6000	Marke Valley (copper), Caradon	10	3½	
5000	Mendip Hills (lead), near Bristol	3¾	2½	
5000	Merllyn (lead), Flint	2½	4	4
1024	Mill Pool (tin and copper), St. Hilary	1	4	
256	Mineral Court (tin), near St. Austell	25½	30 35	
1024	Moditonham & Marrabro' (copper & lead)	2½	2½ 3	
2000	Molland	1	1 1½	
1024	Montgomery (lead and copper)	8	11	
160	Morvah Consols (tin and copper)	2	3	
320	Nansegollan (tin and copper), Camborne	3	3½ 4	8
200	Nanteos (lead), Cardiganshire	34	30	
3000	Nant-y-Car (copper), near Rhayader	2	10	
5000	New Copper Bottom (copper) Bridestowe	1½	1½	
2048	New East Crowndale (copper and tin)	1½	¾	
1024	North Buller (copper), Redruth	5	14 15	
2000	North Downs (copper), Redruth	½	1	
256	North Fowey Consols	—	25	
2000	North Levant (tin and copper), St. Just	1½	3	
2000	North Tamar (silver-lead & copper) Devon	2	2½ 2½	
256	North Trefusis (tin and copper), Redruth	1	1	
1200	North Wh. Buller, or Gt. South Tolgus	5	14	
256	North Tolgus (copper), Redruth	9	10½	
262	North Wheal Leisure, Perranzabuloe	1½	1½	
1024	North Wh. Robert (copper), Walkhampton	2	2	
2048	Okel Tor (lead)	½	½	
512	Old Brimpts (tin), Lydford, Ashburton	½	10	
256	Old Wheal Basset (copper), Redruth	1	2¾	
1026	Pendarves Consols (copper), Camborne	3½	6	
1000	Pendarves and St. Aubyn (tin and copper)	5	11	
406	Penhauger	1	3	
4934	Pennant and Craigwen (lead)	3	3½	
1000	Penralt	1	3 3½	
2048	Pentire Glaze (silver-lead), St. Minver	5½	5½ 7	
700	Pen-y-bank and Erglodd (lead)	4½	5	
1024	Penzance Consols (tin), Sancreed	2½	1	1
1000	Peter Tavy and Mary Tavy (copper)	3½	15 19	
200	Phœnix (copper and tin), Linkinghorne	—	240	
2048	Plymouth Wh Yeoland Con. (tin), Plym.	1¾	5	
1000	Polberro (tin), St. Agnes	15	15	
2000	Polgear (copper and tin)	1	3	
1024	Praed Consols (tin), Towednack	1½	1l 1s	
1024	Prince Albert (tin), Perranzabuloe	1	1	
2500	Rhoswydol and Bacheiddon (lead)	10½	6	
10000	Rhymney Iron (iron), Rhymney	50	12	
10000	Ditto New	7	3	
5000	Rocks and Treverbyn (tin), St. Austell	4½	4¾	
2048	Runnaford Coombe (tin)	3	¾	
1024	Sidney Godolphin (copper), Breage	3½	3¾	
2048	Snowdon (copper), Carnarvonshire	3	3	
2000	South of Scotland	1½	1	
2000	South Carn Brea (copper), Illogan	10	8½	
256	South Friendship Wh. Ann (copper & tin)	30	28 30	
1024	South Plain Wood (copper), Ashburton	4½	7¾	
300	South Speed (copper and tin), Uny Lelant	15	30	
9000	South Tamar (silver-lead), Beer Ferris	1	2½	
256	South Trelawny (lead), near Liskeard	33½	4	
2000	South Wales Mining Company (lead)	1¾	2½	
256	South Wheal Josiah (copper), Calstock	2	2	
280	Spearne Moor (copper), St. Just	30	40	
1024	St. Aubyn and Grylls (copper and tin)	3	4½	
12000	St. Enoder (copper and lead) St. Enoder	1	1½	
999	St. Minver Consols (silver-lead)	1	5	
687	Tavy Consols (copper), near Tavistock	8½	1½	
128	Tokenbury (copper), St. Ive, Liskeard	8½	12	
1200	Tolcarne (tin and copper), Camborne	2½	3	
1024	Trannack and Bosence, St. Erth	1	8	

Shares.	Mines.	Paid.	Last Price.	Present Price.
1024	Trannack United Mines (tin and copper)	1½	7¾	
1024	Trebarvah, Perranuthnoe	1	5	
2048	Trebell Consols (tin and copper), Lanivet	1½	1¾	
600	Tregardock (lead), St. Teath	1	5	
1120	Tregorden (silver-lead) Wadebridge	2¾	6	
1000	Treloweth, St. Erth	4¾	6 7	
600	Trelyon Consols (tin), St. Ive's	4	5 6	
1024	Tremar (copper), Liskeard	1½	1½	¾ 1½
2000	Trenance (copper), Helston	6	5	
6000	Treuault (lime quarries)	21s	21s	
512	Trethevy (copper), St. Cleer	9¾	5½ 5¾	9[illegible]
512	Treville (lead), Lewanick	2¾	7	
604	Trowan Consols (tin), Towedneck	7	10	
100	Trumpet Consols (tin), near Helston	95	100 105	
1000	Tyllwyd (lead), Cardiganshire	2	2½	
4000	Tyn-y-Worglod (slate), near Carnarvon	4	4 5	
500	Tywarnhayle (cop.), Illogan & St. Agnes	60	31½	
512	Tywardreath (copper), St. Blazey	2	10	12 12½
1024	United Mines (copper and tin), Tavistock	10	10	
200	United Mines (copper), Gwennap	300	87½	
5000	Warleggan Consols (copper)	¾	¾	¾ ¾
1024	West Alfred Consols	7¾	17	
5000	West Basset (copper), Illogan	¾	7	
1024	West Beam (tin), St. Austell	14s 6d	1½	2
256	West Damsel (copper), Gwennap	5½	55 57½	
1024	West Ding-Dong (tin)	¾	3½	
1024	West Downs (copper and tin), Whitchurch	2½	2	2½
512	West Fowey Con. (tin & cop.), St. Blazey	40	60	
2048	West Goginan (silver-lead), Cardiganshire	1¾	3	
1020	West Nantymwyn	1	1	
1024	West Par Consols (copper), St. Blazey	10	11	
1024	West Phœnix, Linkinghorne	4	4	
6500	West Polgooth (tin), St. Ewe & St. Mewan	1	1	
200	West Seton (copper), Camborne	67	115 120	
256	West Sharp Tor (copper) Linkinghorne	22	49	
3000	West Shepherd (silver-lead and copper)	2½	2	
940	West Tolgus (copper), Illogan	14½	4½	
120	West Trethellan (copper), Gwennap	15	20	
5000	West Wheal Alfred	1	1½	
512	West Wheal Frances (copper), Illogan	8	15	
4000	West Wheal Friendship (copper)	1½	1	
3715	West Wheal Jewel (tin and copper)	12	1½	
2048	West Wheal Rose	2	2	
4000	West Wheal Russell	¼	¾	
500	West Wheal Towan (copper), Illogan	15	14 15	
1024	West Wheal Treasury (copper), Gwinear	8	4	
1024	West Wheal Virgin (tin), Sancreed	1½	1½ 2	
1024	Weston (lead), Cherbury, Shropshire	¾	¾	
1070	Wheal Adams (lead), Christow, Exeter	13½	16	
1000	Wheal Agar (copper), Illogan	6	5½ 5¾	
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
1228	Wheal Arthur (silver-lead&cop.), Calstock	1½	3 3½	
3072	Wheal Augusta (tin), St. Just	1	1½ 2	
240	Wheal Bal (tin), St. Just	5	16 17	
5000	Wheal Caradon (copper), St. Cleer	1	1	
256	Wheal Carpenter (tin), Gwinear	1½	6 7	
1024	Wh. Carpenter (lead & cop.) S. Sydenham	2	3	
124	Wh. Castle and Boswedden (tin & copper)	5	20	
1024	Wheal Catherine (silver-lead), Liskeard	2½	2½	
1024	Wheal Chiverton (copper)	1	1 1½	
1024	Wheal Crebor (copper), Tavistock	3	5	5
1024	Wheal Cupid (copper), Gwennap	1	1¾	2
3000	Wheal Dora (tin and copper), St. Cleer	3¾	6¼	
2048	Wheal Edward, Tavistock	¾	1½	1½ 2
182	Wheal Elizabeth (copper), Redruth	23	6	
1024	Wheal Emily (antimony and lead)	3	5	
182	Wheal Ennis (lead), St. Erme	12	20	
1070	Wheal Enys (tin), Wendron	1½	1½	
1024	Wheal Fortescue (copper), Tavistock	5	1½	
764	Wheal Franco (copper), near Tavistock	14½	11	
100	Wheal Friendly (tin), St. Agnes	70	31 ½	
1536	Wheal Gill (cop. and lead), Liskeard	2	—	
1000	Wheal Guskis (tin and copper), St. Hillary	¾	1	
2048	Wheal Hamlyn, near Oakhampton	1	1	
2560	Wheal Harriet (copper), Camborne	1	¾ 1½	
2048	Wheal Harris (lead), near Tavistock	¾	1	
216	Wheal Henry (copper), Kea, near Truro	25	8	
6000	Wheal Langford (copper and silver-lead)	¾	¾ 1	
2000	Wheal Langmaid (lead)	¾	1	
1000	Wheal Lemon, Germoe	13s		¾
1024	Wheal May (silver-lead and copper	2½	2¾	
990	Wheal Mary (copper), Redruth	16	6¾	
1024	Wheal Mary Ann (copper), Bridestow	—	2	
1024	Wheal Mary Emma, Tavistock	1½	2	
1024	Wheal Neptune (copper), Perranuthnoe	2	3	
1080	Wheal Oak, near Helston	1¼	1½	
3000	Wheal Penhale (lead and copper)	2¾	4¾	
128	Wheal Plenty (copper), Redruth	24	38 39	
128	Wheal Pollard (copper), St. Cleer	15¾	10	
210	Wheal Prospect	4	7	
5000	Wheal Providence, South Sydenham	¾	3	
256	Wheal Prudence (copper), St. Agnes	2½	4	
2048	Wheal Robins	¾	1½	
4000	Wheal Russell (copper), Tavistock	1½	1½	1½ 1¾
5000	Wheal Ruth (tin), Shepstor	2	2	
512	Wheal Sophia (silver-lead), Lezant	7	7	
1024	Wheal Speedwell (copper and tin)	2	2	
1024	Wheal Squire (copper), St. Erth	1½	1½	
256	Wheal St. Agnes (tin)	¾	1	2½
1024	Wheal Stanagwyn (copper), St. Stephen's	1	7½ 10	3 4
1000	Wheal Susan, Breage and Crowan	1½	2	
1024	Wheal Sydney, Plympton	1½	4	4
2000	Wheal Tom (tin & copper), Stoke Clims.	5	11¾ 12	
512	Wheal Trefusis (copper), Gwennap	8½	14½	
1024	Wheal Trelusback (copper), Stythians	5	5	
256	Wheal Tremaine (copper), St. Ervan	11	1 1½	
3300	Wheal Trescoll (tin), Lanivet, Bodmin	3	1½	
4224	Wheal Trewane (silver-lead), St. Kew	1½	2¾	
267	Wheal Tryphena (tin and copper)	40	18½	
126	Wheal Union (copper), Redruth	40	40	
6000	Wh. Unity Consols (cop. & tin), Gwinear	2	2½	
1024	Wheal Uny (tin and copper)	2	5 5½	
1024	Wheal Venton (silver-lead), Liskeard	4½	7½	
1000	Wheal Vincent (tin), Alternum	7½	7½	
512	Wheal Violet (tin and cop.), St. Stephens	1½	3 5	
256	Wheal Vlow	2	4	
4096	Wheal Zion (copper and lead), Tavistock	1½	6½	

Shares.	FOREIGN MINES.	Paid.		Present Price.
12000	Annotto Bay Mining Association (copper), Jamaica	6	5½ 6	
19000	Australian (copper), South Australia	1¾	1½	1 1½
3250	Kinzigthal Mining Association (silver), Germany		2½	
12000	Liguanea and General Mining Company of Jamaica	3	2¾	
5000	Linares (lead), Spain	2½	2½	
500	Ditto Preference	3	3¾	
4500	Ditto Additional		1½	
20000	Mexican and South American (copper), Mexico	4½	4½	
5000	National Brazilian (gold), Brazil	2½	2½ 2¾	
104000	North British Australasian (copper), S. A. & New Zea.		½	
10000	Worthing (copper), Adelaide, South Australia		4	3 4

CORNISH STEAM-ENGINES.

The number of pumping-engines reported for the month of June is 25—the quantity of coals consumed being 2372 tons, lifting, in the aggregate, 22,000,000 tons of water 10 fathoms high—the average duty of the whole is, therefore, 52,000,000 lbs. lifted 1 foot high by the consumption of a bushel of coal.—The following have exceeded the average:—

Mines.	Engines.	Length of stroke	Load in pounds.	Load per sq. inch on pist.	Strokes per min.	Consump. of coal in bus.	Millions lifted 1 foot by consump. of 1 bush. coal	Lifted 1 foot by 1c. of coal.
Great Work	Leed's 60-in.	9·0	55,343	15·2	7·9	2424	64·0	76
Wh. Treasury	40-inch	9·0	30,952	21·9	6·2	1526	52·4	63
E. Wh. Crofty	Trevenson's 80	10·33	82,333	12·2	5·9	3128	55·8	66
Carn Brea	Sims's 50 & 90	9·0	61,802	24·4	4·0	1500	56·1	67
Poldice	Sims's 85-inch	10·33	78,207	9·6	9·9	4568	54·1	65
S. W. Frances	75-inch	11·0	70,085	12·9	5·1	2524	62·7	75
United Mines	Taylor's 85-in.	11·0	99,071	15·8	6·3	4760	59·3	71
Ditto	Cardozo's 90-in.	9·0	100,682	13·8	6·5	4455	52·2	62
Ditto	Eldon's 30-inch	9·0	13,631	16·0	9·5	773	56·1	67
Ditto	Hocking's 85-in.	10·0	97,817	14·4	6·9	4460	57·1	68
Treleigh Con.	Garden's 60-in.	10·25	38,201	10·8	4·2	1200	54·4	65
Tywarnhayle	Gardiner's 80-in	10·0	82,079	13·0	7·7	4296	58·3	70
East Wh. Rose	Michell's 85-in.	10·0	82,991	13·1	3·0	1894	59·9	71

ACCIDENTS—(*Continued.*)

Billinge.—H. Foster was killed by a fall of coal at the Bispham Colliery.

Pemberton.—T. Topping was killed by the falling of a large stone upon him, while working in Messrs. Blundell's Colliery.

St. Helen's.—As W. Ashcroft was taking down "props" in the Sankey Brook Colliery, the roof fell and killed him.

Stainborough.—T. Dean was killed at Messrs. Field and Cooper's colliery by a fall of roof.

Dudley.—J. Peters was killed, and J. Westwood and T. Wright injured, by a fall of [illegible] at the Blue-fly Colliery.

Wolverhampton.—E. Venables and F. Newman were severely burnt at Mess[illegible]row's Tin-works, in Horsley-fields, by the explosion of a hot charcoal cinder, which fell whilst they were removing it to the puddling furnace into some water.

Tipton.—W. Whitfield was so dreadfully injured by a fall of coal at Messrs. Bagnall's Groveland Colliery, that it was found necessary to amputate his right leg and arm. The poor fellow had the misfortune to fracture the same leg, when a boy, by falling down a pit, and where it is stated he remained before he was discovered for the period of a day and a night, and the limb had never been since set rightly.

Glamorganshire.—D. Thomas was killed by a fall of coal at the level of Tygwyn-bach.

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